

IS ACTIVE PLAY EXTINCT?

2012

Active Healthy Kids Canada
Report Card on Physical Activity
for Children and Youth



active
healthy
kids
CANADA

THE 2012 ACTIVE HEALTHY KIDS CANADA REPORT CARD ON PHYSICAL ACTIVITY FOR CHILDREN AND YOUTH

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A summary of the 2012 Report Card and the long-form version are available at www.activehealthykids.ca.

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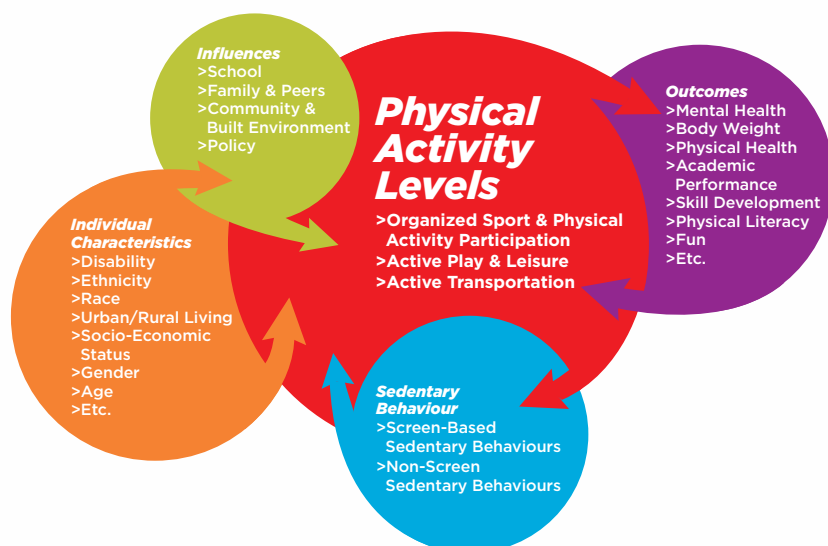
Active Healthy Kids Canada is a national organization that was established in 1994. The focus of its efforts is to make physical activity a major priority in the everyday lives of Canadian families. To achieve this, Active Healthy Kids Canada brings forward scientific knowledge and advocacy strategies to stakeholders who can improve the opportunities for children and youth across Canada to participate in physical activities. The Report Card is Active Healthy Kids Canada's primary tool for influencing stakeholders and pushing for change. This year marks the 8th consecutive year of its publication. We hope the 2012 Report Card will continue to have an impact on the promotion of physical activity in Canada and abroad.

In past years, the Report Card has proven useful as an advocacy tool.

Governments, non-governmental organizations, philanthropic groups, corporations and the research community have all used it, and there is overall agreement that the Report Card has helped increase awareness of the physical activity status of Canadian children and youth. The Report Card has been an influential tool in many countries around the world (e.g., United States, Mexico, South Africa, Kenya), where it has been used as a blueprint for collecting and sharing knowledge about the physical activity of their young people.

Common to any report card are the grades. The 2012 Report Card gives letter grades on 24 different indicators. (For more information on the grading scheme, see “Methodology and Data Sources” on page 100.) An indicator is anything measurable that either comprises physical activity (e.g., active play and leisure, organized sport) or influences it (e.g., physical education, availability of physical activity facilities, government policies). The indicators in the 2012 Report Card play an important role in drawing attention to specific areas where we need to improve our efforts, as well as where we are succeeding. Together they reveal the overall status of physical activity among children and youth in Canada.

The figure below summarizes the components of physical activity and the influences on them that are graded in the 2012 Report Card. Individual characteristics that affect physical activity and the outcomes of physical activity are not graded, but they may impact grades, and thus are discussed throughout the 2012 Report Card. The arrows in the figure reveal the relationships among all these variables, illustrating the complexity of the relationships. Many factors impact the physical activity of children and youth, and must all be considered in the promotion of physical activity.



Why is Physical Activity Important?

Many studies highlight the health benefits of physical activity for children and youth. Physical activity, in the form of either structured exercise or unstructured movement and play, is associated with improvements in aerobic fitness and motor skills, as well as enhanced cognitive abilities.¹ Aerobic fitness in particular has been linked to a decreased risk for chronic diseases and the metabolic syndrome (the simultaneous occurrence of several metabolic disorders, which increase the risk of diabetes and cardiovascular disease).² Specifically, physical activity is associated with favourable lipid and lipoprotein levels, blood pressure, adiposity and fitness levels in both normal weight and overweight youth.²⁻⁴ Furthermore, among overweight children, triglyceride and fasting insulin levels decrease with increased weekly physical activity.²⁻³



In addition to the positive association between physical activity and aerobic fitness, there also exists evidence that motor proficiency increases with the time spent in moderate- to vigorous-intensity physical activity (MVPA) and decreases with increased sedentary time among preschoolers.⁵ Furthermore, physical activity levels have been positively linked to cognitive function during development in school-aged children (aged 4-18). Games and exercises that require problem-solving are associated with improvements in perceptual skills, IQ, academic achievement, verbal tests, mathematics tests and developmental level.⁶ Sedentary children who begin to partake in physical activity can also benefit from enhanced cognitive developments.⁴ Physical activity also increases self-esteem, and children and youth who are physically active appear less likely to experience mental health problems.⁷

What's New in Physical Activity in Canada?

How Much Physical Activity Do Canadian Children and Youth Need?

Between 1998 and 2002, Health Canada and the Canadian Society for Exercise Physiology (CSEP) released the first set of physical activity guidelines for school-aged children and youth, adults and older adults to set measurable targets for surveillance, provide guidance to public health professionals and motivate Canadians to be more active.⁸ With leadership from CSEP, new (updated) Canadian physical activity guidelines for school-aged children (aged 5-11 years), youth (aged 12-17 years), adults (aged 18-64 years) and older adults (aged 65 years and older), as well as the first ever Canadian sedentary behaviour guidelines for children and youth, were released in early 2011.⁹

The guidelines are for all apparently healthy children and youth, and recommend the following:

For health benefits, children (age 5 to 11) and youth (age 12 to 17) should get at least 60 minutes of MVPA daily. This should include vigorous-intensity activities at least 3 days per week and activities that strengthen muscle and bone at least 3 days per week. More daily physical activity provides greater health benefits.

Canadian Physical Activity Guidelines for the Early Years (Aged 0-4 Years)

After these guidelines were released, and in response to a call from healthcare providers, parents, childcare providers and fitness practitioners, work to develop similar guidelines for the early years began. In March 2012, CSEP, with assistance from multiple partners, stakeholders and researchers, released the first Canadian Physical Activity Guidelines for the Early Years (Aged 0-4 years) and concomitantly released the first Canadian Sedentary Behaviour Guidelines for the Early Years (Aged 0-4 years) (see Figure 1).

The health benefits of physical activity in school-aged children and youth have been well documented,¹⁰ but this relationship in young children (i.e. aged < 5 years) is less clear.¹¹ Canada has taken the lead on clarifying this relationship by performing a systematic review of physical activity in preschoolers, which will be published later this year.

Key evidence to inform these guidelines comes from a systematic review examining the relationship between physical activity and 6 health indicators (adiposity, bone and skeletal health, motor skill development, psychosocial health, cognitive development, cardio-metabolic health indicators) in the early years (aged 0-4 years). Relevant evidence was identified by a systematic search of 6 electronic bibliographic databases and evaluated by multiple reviewers. Government documents were obtained through correspondence with content experts and through government websites. Bibliographies of key studies and review papers were scanned to identify further studies. Evidence presented in the systematic review was reviewed and interpreted by national and international content experts. Expert opinion and other international guidelines were used to complement the evidence upon which these guidelines were developed.



PADDLE BALL
Child's Toy

GUIDELINES

For healthy growth and development:







-  Infants (aged less than 1 year) should be physically active several times daily – particularly through interactive floor-based play.
-  Toddlers (aged 1–2 years) and preschoolers (aged 3–4 years) should accumulate at least 180 minutes of physical activity at any intensity spread throughout the day, including:
 -  A variety of activities in different environments;
 -  Activities that develop movement skills;
 -  Progression toward at least 60 minutes of energetic play by 5 years of age.
-  More daily physical activity provides greater benefits.

Figure 1. The Canadian Physical Activity Guidelines for the Early Years (Aged 0–4 Years) (Source: CSEP).

These guidelines are relevant to all apparently healthy infants (aged < 1 year), toddlers (aged 1–2 years) and preschoolers (aged 3–4 years), irrespective of gender, race, ethnicity or family socio-economic status. Parents and caregivers should encourage infants, toddlers and preschoolers to participate in a variety of physical activities that support their healthy growth and development, are age-appropriate, are enjoyable and safe, and occur in the context of family, child care, school and community.

Infants should be physically active daily as a part of supervised indoor and outdoor experiences. Activities could include tummy time, reaching and grasping, pushing and pulling, and crawling. Children in the early years should be physically active daily as part of play, games, sports, transportation, recreation and physical education. For those who are physically inactive, increasing daily activity toward the recommended levels can provide some health benefits.

Following these physical activity guidelines may improve motor skills, body composition, and aspects of metabolic health and social development. These potential benefits far exceed the potential risks associated with physical activity. These guidelines may be appropriate for infants, toddlers and preschoolers with a disability or medical condition; however, their parents or caregiver should consult a health professional to understand the types and amounts of physical activity appropriate for their child.

This recommendation places a high value on the advantages and benefits of physical activity that accrue throughout life. It also takes into consideration the preferences of practitioners to have guidance in this area for young children and the importance of setting targets for surveillance.

For more information on the guidelines, visit www.csep.ca/guidelines.

Sedentary Behaviour Guidelines for the Early Years (Aged 0–4 Years)

Although it has been generally assumed that young children are inherently active enough, accumulating evidence suggests that sedentary lifestyles are occurring in the early years. Children in the early years spend 73–84% of their waking hours being sedentary.^{12–13} Furthermore, most young children engage in more than 1 hour per day of screen time¹⁴ and are being exposed to screen-based activities before the age of 2 years.¹⁵ Until recently, there has been little guidance on sedentary behaviour thresholds associated with healthy growth and development. Sedentary behaviour guidelines for young children were recently released as part of new physical activity guidelines in Australia¹⁶ and the UK.¹⁷ Though the UK identified no specific cut-point for sedentary behaviour, guidelines from Australia state that screen time is not appropriate for those < 2 years of age, and should be limited to < 1 hour per day for those aged 2–5 years. Similarly, the American Academy of Pediatrics discourages media use in children < 2 years of age, and suggests that it should be limited to < 2 hours of quality educational screen time per day for children > 2 years.¹⁸ Finally, recommendations from the Canadian Paediatric Society state that television viewing should be limited to 1–2 hours per day for children of all ages.¹⁹ A systematic review that informed these recommendations will be published later this year.

The Canadian sedentary behaviour guidelines followed the same rigorous and transparent process that was used to develop the Canadian physical activity guidelines for the early years. As with the development of the physical activity guidelines, the evidence to inform the sedentary behaviour guidelines comes from a systematic review examining the relationship between sedentary behaviour and 6 health indicators (adiposity, bone and skeletal health, motor skill development, psychosocial health, cognitive development, cardio-metabolic health indicators) in the early years (aged 0-4 years). In addition to a systematic search of the published literature, government documents were obtained through correspondence with content experts and through government websites and bibliographies of key studies. Evidence presented in the systematic review was reviewed and interpreted by national and international content experts and issue stakeholders. A consensus meeting was convened to discuss and debate the information presented in the systematic review and to draft recommendations for the Canadian Sedentary Behaviour Guidelines for the Early Years (aged 0-4 years).

These guidelines are relevant to all apparently healthy infants (aged < 1 year), toddlers (aged 1-2 years) and preschoolers (aged 3-4 years) irrespective of gender, race, ethnicity or family socioeconomic status. For healthy growth and development, parents and caregivers are encouraged to limit sedentary behaviours of infants, toddlers and preschoolers in the context of family, child care, school and community.

The benefits of reduced sedentary time exceed potential risks. In particular, sedentary screen time is associated with detrimental effects on aspects of cognitive and psychosocial development and may be associated with adverse effects on body composition.

These guidelines may be appropriate for infants, toddlers and preschoolers with a disability or medical condition; however, their parents or caregivers should consult a health professional to understand the types and amounts of activities appropriate for their child.

This recommendation emphasizes the harms associated with exposure to screen time, the value of having a guideline that is acceptable to parents and practitioners, and the importance of avoiding screen time in the earliest years of development. The guidelines are available in Figure 2.

Revisiting the After-School Period

The after-school period (i.e., 3-6 p.m. on school days) was an important area of focus in the 2011 Report Card.²⁰ Results from the 2007-09 Canadian Health Measures Survey (CHMS) revealed that 6- to 19-year-olds in Canada were failing to take advantage of their discretionary time for physical activity in the after-school period. They accumulated an average of only 14 minutes of MVPA between 3 and 6 p.m. The rest of the time (166 minutes) was spent in light physical activity or sedentary pursuits.²¹

GUIDELINES



For healthy growth and development, caregivers should minimize the time infants (aged less than 1 year), toddlers (aged 1-2 years) and preschoolers (aged 3-4 years) spend being sedentary during waking hours. This includes prolonged sitting or being restrained (e.g., stroller, high chair) for more than one hour at a time.



For those under 2 years, screen time (e.g., TV, computer, electronic games) is not recommended.



For children 2-4 years, screen time should be limited to under one hour per day; less is better.

Figure 2. The Canadian Sedentary Behaviour Guidelines for the Early Years (Aged 0-4 Years) (Source: CSEP).

Figure 3. Level of Youth Crime on Weekdays and Weekends, and at Various Times of Day, 2008 (Source: Adapted From Statistics Canada, Canadian Centre for Justice Statistics).

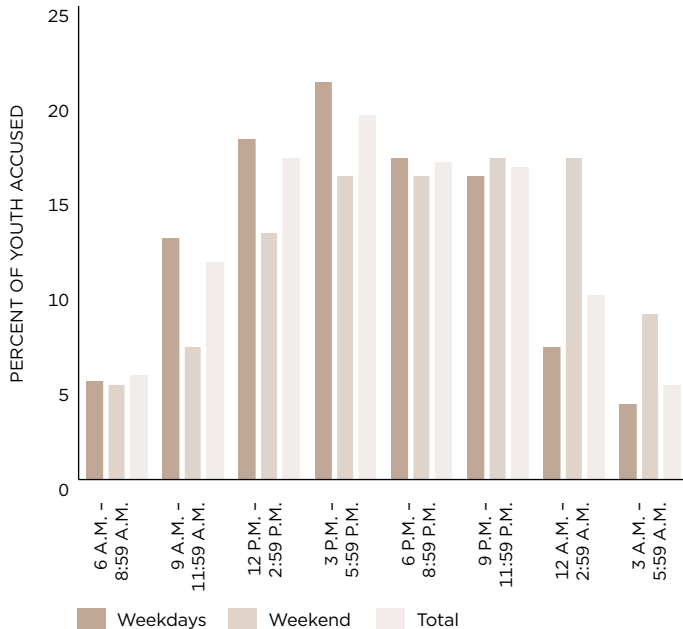
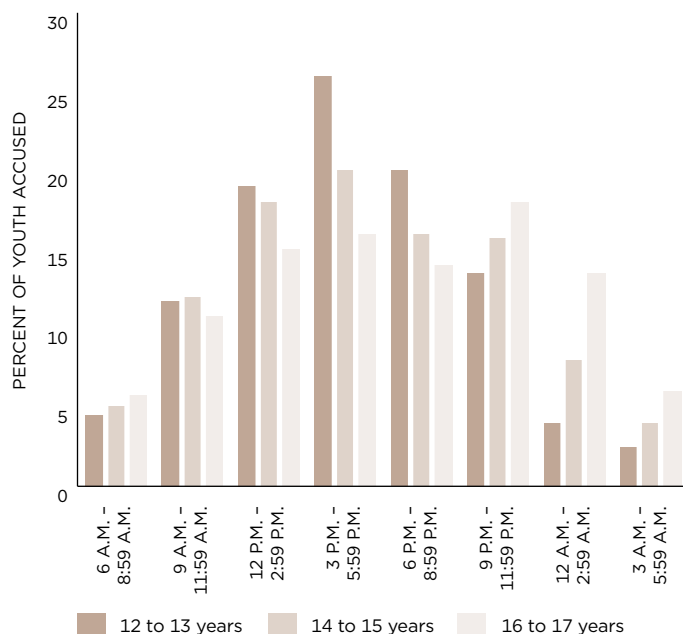


Figure 4. Prevalence of Late Evening and Night-time Crimes Among Teens, 2008 (Source: Adapted From Statistics Canada, Canadian Centre for Justice Studies).



A recent analysis from the 2007-09 CHMS on the daily physical activity patterns of Canadian children and youth reinforces the importance of the after-school period as a window of opportunity for the accumulation of physical activity. For example, Canadian children and youth are more physically active on weekdays (57 minutes of daily MVPA on average) than weekend days (47 minutes of daily MVPA on average) and accumulate the bulk of their physical activity between 11 a.m. and 5 p.m., with peaks occurring at lunchtime and just after school. The most physically active time of the day for younger children (6- to 10-year-olds) is lunchtime (11:00 a.m. to 12:59 p.m.), when boys and girls accumulate an average of 13.1 and 11.4 minutes of MVPA, respectively. For older children and youth, the peak in physical activity participation is in the after-school period (3:00-4:59 p.m.), when boys and girls accumulate an average of 10.8 and 9.2 minutes of MVPA respectively. The most physically active children and youth for each gender and group (> 66th percentile for daily MVPA) accumulate more minutes of MVPA in every period of the day, with the largest difference occurring between 3:00 and 4:59 p.m.²¹

Interestingly, police-reported crimes committed by teenagers also peak in the after-school period from 3-6 p.m. (Figures 3-4).²² If Canadian youth increase the amount of time they spend in purposeful physical activity during the after-school period, this might have a mitigating effect on the volume of crime committed by teenagers during this time of the day. However, it is most likely that this physical activity participation must be in combination with programs that seek to address wider personal and social development to systematically address criminal behaviour.²³

Results from the Canadian Fitness and Lifestyle Research Institute's (CFLRI) 2011 Opportunities for Physical Activity at School Survey also provide an update on the after-school period. Across Canada, 72% of schools report the availability of supervised physical activity programs during the after-school period. However, disparities do exist across school size, region and grade level. The availability of supervised physical activity programs after school increases as a school's student population size increases. The availability of these programs is also more likely in Quebec schools and French-language schools, and less likely in Ontario schools, English-language schools and rural schools (compared to schools in urban settings). The number of days per week that supervised after-school physical activity programs are offered also increases with increasing grade level. These programs are offered about once a week from junior kindergarten to Grade 2, twice a week from Grades 3-6, 3 times per week in Grades 7-8, and 4 times per week from Grades 9-12 (2011 Opportunities for Physical Activity at School Survey, CFLRI).

In the same survey, 24% of Canadian schools report that the majority of their students (more than 50%) participate in supervised physical activity programs immediately after school. Just as the availability of these programs depends on several variables, the same is true for participation. Participation is reported as greater in urban and rural schools (compared to schools in suburban settings) and comprehensive schools, in the smallest schools (fewer than 200 students) and in schools situated in communities with fewer than 1,000 residents versus schools situated in communities with more than 10,000 residents (2011 Opportunities for Physical Activity at School Survey, CFLRI).

As evidence around the after-school period continues to grow, it is important to create awareness of the potential this time of day offers for healthy, active living pursuits in children and youth. Parents, caregivers, after-school program providers, and children and youth need to understand that the after-school period is an important window of opportunity for physical activity engagement.



ROLLER SKATE
Child's Activity

Another Barrier to Physical Activity: Lack of Sleep

Although the promotion of physical activity often involves measures to reduce sedentary behaviours in children and youth, the reduction of one sedentary behaviour – sleep – is a barrier to physical activity, ironically enough.

Sleep curtailment has become endemic in modern societies, with population statistics revealing a decrease in sleep duration by more than 1 hour in children over the past few decades.²⁴ A growing body of evidence shows an association between sleep loss and mental distress, depression, anxiety, weight gain, hypertension, diabetes, high cholesterol levels, premature death and adverse health behaviours such as physical inactivity and poor eating habits.²⁵⁻²⁶ Thus, sleep loss is an under-recognized public health problem that has a cumulative effect on physical and mental health.

There is growing evidence that short sleep duration is a determinant for obesity.²⁷⁻²⁹ A number of mechanisms have been proposed to explain this association including an up-regulation of appetite-stimulating hormones, a longer exposure to an obesogenic environment and a decrease in spontaneous physical activity (Figure 5). Since chronic sleep restriction is a common feature of our modern lifestyle, studies aimed at investigating the links among short sleep duration, physical inactivity and obesity are relevant from a public health standpoint.

In terms of Canadian research, short sleep duration was shown to be independently associated with overweight and obesity in Quebec children.³⁰ Interestingly, 23% of the children in this study did not get the recommended 10-11 hours of sleep per night for school-aged children.

The timing of sleep also appears to be important. According to a recent study, the pattern of “early to bed and early to rise” seems to help keep kids leaner and more physically active than their night-owl peers, even with the same total amount of sleep.³¹ Body weight and the use of free time over a 4-day period were compared in 2,200 9- to 16-year-olds. Those who went to bed late and got up late were 1.5 times more likely to be obese than those who went to bed early and got up early. Further, late-nighters were almost twice as likely to be physically inactive and 2.9 times more likely to sit in front of the television and computer or play video games for more than 2 hours, which exceeds the Canadian Sedentary Behaviour Guidelines for School-Aged Children and Youth of no more than 2 hours of screen time per day. Therefore, it appears that children should be aiming for 10-11 hours of sleep daily, preferably between the hours of 10 p.m. and 8 a.m., to lower their risk of obesity and excessive screen time.

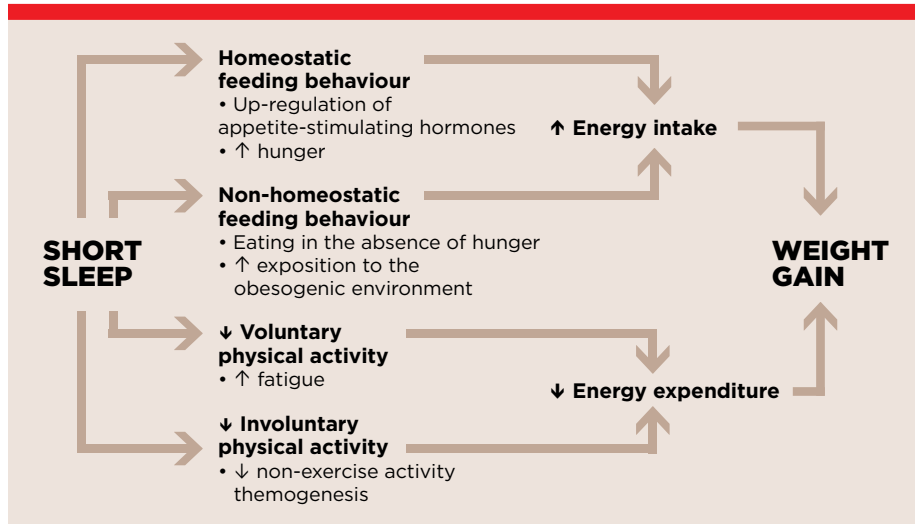


Figure 5. Mechanisms That May Explain How Short Sleep Duration Predisposes a Person to Weight Gain (Source: Chaput et al., 2010²⁶). Note: In Order to Produce Weight Gain, Reduced Sleep Must Result in Increased Caloric Intake and/or Reduced Energy Expenditure.

Sleep has beneficial effects beyond the commonly accepted benefits of restoration and maintenance of tissue structure and function. It is important to remember that a good night's sleep is the “normal” biological condition. No one can effectively argue that lack of sleep is healthy. For this reason, there is minimal risk in taking a pragmatic approach and encouraging a good night's sleep as an adjunct to other health promotion measures.

According to the National Sleep Foundation,³² 5- to 10-year-olds require 10-11 hours of sleep nightly, and 10- to 17-year-olds need 8.5-9.25 hours of sleep per day (see Table 1 and the Healthy Sleep Recommendations below).

Table 1. How Much Sleep Do You Really Need?
(Source: Adapted From the National Sleep Foundation, 2011³²)

AGE	SLEEP NEEDS
Newborns (0–2 months)	12–18 hours
Infants (3–11 months)	14–15 hours
Toddlers (1–3 years)	12–14 hours
Preschoolers (3–5 years)	11–13 hours
School-age children (5–10 years)	10–11 hours
Teens (10–17 years)	8½–9¼ hours
Adults	7–9 hours

Healthy Sleep Recommendations

The following is a list of recommendations that parents can follow to optimize the sleep hygiene of their children and youth:

- Establish consistent sleep and wake schedules, even on weekends.
- Create a regular, relaxing bedtime routine for your kids, such as soaking in a warm bath or listening to soothing music. This routine should begin an hour or more before the time your kids fall asleep.
- Ensure a sleep-conducive environment for your kids, namely, one that is dark, quiet, comfortable and cool.
- Ensure your kids are sleeping on a comfortable mattress and pillows.
- Remove televisions, computers, video games and phones from their bedroom.
- Finish eating at least 2-3 hours before your kids' regular bedtime.
- Encourage your kids to be physically active during the day or at least a few hours before bedtime.

Is Active Play Extinct?

Play has been called the business of childhood.³³ It comes in many forms, but is generally freely chosen, spontaneous, self-directed and fun.³⁴⁻³⁵ Play allows children and youth of all ages to try new things, test boundaries, learn from their mistakes and, perhaps most importantly, enjoy being active. And while active play is fun, it's certainly not frivolous. One Ontario study showed that kids aged 3-5 who played outdoors for at least 2 hours a day were far more likely to meet physical activity guidelines.³⁶ Play has also been shown to foster and improve:³⁷⁻⁴⁰

- Motor function
- Creativity
- Decision-making
- Problem-solving
- Executive functions – the ability to control and direct one's emotions and behaviours
- Social skills – sharing, taking turns, helping others, resolving conflict
- Speech (in preschoolers)

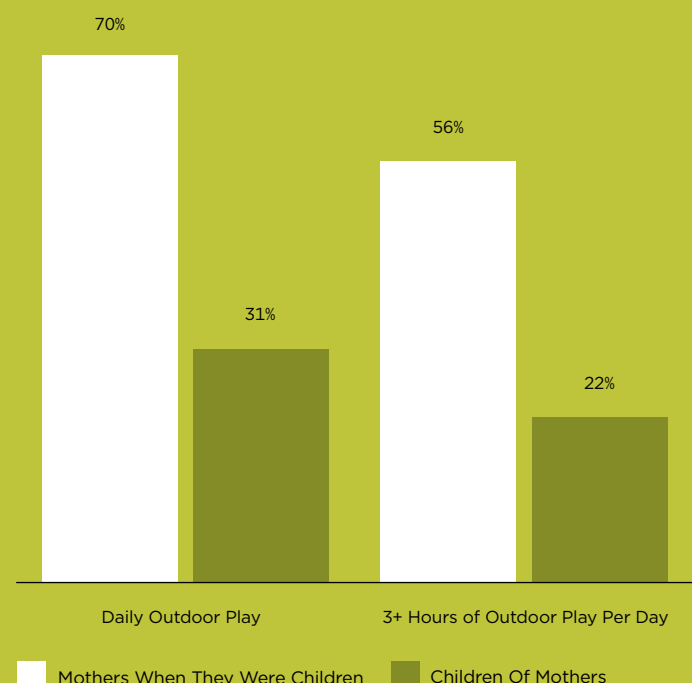
A more detailed summary of the beneficial effects of play can be found elsewhere³⁸ but this list provides a sampling of the benefits that active play may offer to children's physical, cognitive, emotional and social development.

Unfortunately, the structure and demands of modern Canadian life may be engineering active play out of our children's lives. Perhaps in a misguided bid to protect and direct them at all times, we have taken away our children's freedom to throw open the doors and go play. Researchers agree the decline of play over the past 50 or 60 years has been consistent and substantial.³⁹

- The proportion of Canadian kids who play outside after school dropped 14% over the last decade (2010 Physical Activity Monitor [PAM], CFLRI).
- 46% of Canadian kids get 3 hours or less of active play per week, including weekends (2007-09 CHMS).
- Canadian kids are not playing actively in their "free time." At lunch and after school, kids are getting only 24 minutes of MVPA out of a possible 4 hours (2007-09 CHMS).

Data from other countries corroborate what is being seen in Canada. For example, in a nationally representative time-use study conducted by researchers at the University of Michigan in 1981 and 1997, parents were asked to keep records of how their children spent their time. Over this 16-year time period, there was a 25% decrease in parent-reported play time in 6- to 8-year-olds, and a 16% decrease for the entire sample of 3- to 12-year-olds.⁴¹ In another nationally representative study from the US, 85% of mothers agreed their children (3- to 12-year-olds) play outdoors less than they (the mothers) did when they were children (for further data from this study see Figure 6).⁴² In a UK study, only 12% of people over 65 years old had not played outdoors every day of the week as children, compared to almost half of children today.⁴³ Another UK study showed a decline in active play where 71% of adults reported playing outside as children compared to only 21% of children today.⁴⁴

Figure 6. Prevalence of Self-Reported Daily Outdoor Play in Mothers When They Were Children Vs. Prevalence in Their Children (3- to 12-Year-Olds) (Source: Adapted From Data From Clements, 2004⁴²).



While current crime rates in Canada are about equal to what they were in the 1970s,⁴⁵ the increase in news coverage of crime has fuelled parental fears of letting their children outside.³⁹ Among mothers, 82% cite safety concerns and almost half of parents cite fear of exposure to child predators as reasons they restrict outdoor play.⁴² 58% of Canadian parents agree they are very concerned about keeping their children safe and feel they have to be “over-protective of them in this world.”⁴⁶

Unfortunately, over-protective parenting, plus the lure of ever-present technology, is driving kids into highly controlled environments, where they have little opportunity to let loose, run around, build, explore and interact with peers on their own terms.

- Despite having more free time on weekends compared to weekdays, kids are more active during the week.²¹
- Canadian kids spend 63% of their free time, after school and on weekends, being sedentary.²¹
- Instead of playing outdoors, Canadian kids in Grades 6 to 12 are spending 7 hours and 48 minutes per day in front of screens.⁴⁷

Even at school, recess is increasingly being threatened by adult beliefs that this “free time” is better spent in academic study. Not only is there value in this free time, it’s what kids want:

- In one global study, playing with friends was the single favourite pastime of kids around the world.⁴⁶
- 92% of Canadian children said they would choose playing with friends over watching TV.⁴⁶
- Given the choice, 74% of Canadian kids in Grades 4-6 would choose to do something active after school, with 31% choosing to play with their friends at the playground (The Canadian Assessment of Physical Literacy).⁴⁸

Supporting and encouraging opportunities for safe, free, unstructured play, especially outdoors, may be one of the most promising, accessible and cost-effective solutions to increasing child and youth physical activity in Canada.

How to Press Play: Recommendations for Increasing Opportunities for Active Play

EARLY YEARS

Provide access to safe, open areas, either indoors or out, where kids can move freely. Add balls and toys to encourage more vigorous play at home, and in childcare and community settings. Get down on the floor and play with them!

SCHOOL-AGE CHILDREN

Provide access to fields, nature, skipping ropes, balls and equipment to facilitate active play. To counter safety concerns, parents and caregivers can take turns supervising kids at play in the park or on the block, encourage kids to play outside with a buddy, and consider street-proofing courses.

YOUTH

Accept that tweens and teens need free time to play without the assumption they are “up to no good.” Increase youth-friendly play spaces where youth can hang out and direct their own activities.

KIDS OF ALL AGES:

- If your child has no free time, consider reducing the number of scheduled activities.
- To increase neighbourhood safety, advocate for traffic-calming measures such as speed bumps and roundabouts, which have been shown to decrease pedestrian-vehicle accidents.
- To reduce screen time, encourage your kids to spend time outdoors, every day, instead of in front of a TV or video games.



PHYSICAL ACTIVITY



GOGGLES

Child's Swimwear

F

Physical Activity Levels

THE GRADE FOR THE PHYSICAL ACTIVITY LEVELS INDICATOR IS AN F FOR THE 6TH CONSECUTIVE YEAR, which reflects the ongoing reality that very few children and youth in Canada are meeting the Canadian Physical Activity Guidelines that recommend at least 60 minutes of MVPA per day.

YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	D	D	F	F	F	F	F	F

KEY FINDINGS

- > This is the core grade in the Report Card; unfortunately, it remains an F for the 6th consecutive year, as objectively measured data indicate that only 7% of children and youth are meeting Canada's guidelines of 60 minutes of physical activity a day (2007-09 CHMS).
- > How far off the mark are we? While achieving the guidelines for all children is essential for health benefits, it is encouraging to note that 44% of Canadian kids are getting 60 minutes of physical activity on 3 days of the week.⁴⁹
- > 5- to 19-year-olds in Canada take an average of 11,350 steps per day (2009-11 Canadian Physical Activity Levels Among Youth Survey [CANPLAY], CFLRI), which is equivalent to the levels seen in the 2005-06 CANPLAY. However, only 15% take at least 12,000 steps per day on at least 6 days of the week, which is important because this is a better representation of adherence to the physical activity guidelines.
- > The percentage of 10- to 16-year-olds accumulating 60 minutes of MVPA on a daily basis has remained stable between the 2002 (18%), 2006 (19%) and 2010 (18%) Health Behaviour in School-Aged Children (HBSC) surveys.

RECOMMENDATIONS

- > The majority of Canadian children and youth need to make permanent changes to their routine physical activity patterns. Such changes can include increased active transportation, engagement in a new sport or activity club, and regular outdoor active play.
- > Children and youth should be encouraged to add bits of physical activity throughout their day – before school, during school, after school, in the evenings and on the weekend.
- > Expand social marketing efforts to communicate the importance of regular, lifestyle-embedded physical activity throughout the day and week.

RESEARCH GAPS

- > More research is needed on physical activity in the early years.
- > More research is required on surveillance needs (e.g., indoor vs. outdoor physical activity).

How Many Daily Steps Must Children and Youth Take to Meet the Canadian Physical Activity Guidelines?

In previous Report Cards, different daily step count targets have been used to estimate the percentage of children and youth adhering to physical activity guidelines, including 16,500 steps per day and, more recently, 13,500 steps per day.^{20,48} In a recent analysis (2007-09 CHMS) involving accelerometer measures of physical activity and pedometer step count data from 6- to 19-year-olds in Canada, the relationship between these 2 physical activity measurement tools was analyzed to determine which daily step count target most closely equated to the Canadian Physical Activity Guidelines, which recommend that children and youth accumulate at least 60 minutes of MVPA every day. Results showed that a daily step count target of 12,000 steps resulted in closer population estimates of meeting the physical activity guidelines than the currently used target of 13,500 steps per day.⁵⁰ This information may be helpful to researchers and practitioners using pedometers to monitor physical activity levels among Canadian children and youth. It is likely that research will continue to be published in this area, and Active Healthy Kids Canada will continue to report on any progress or changes in successive Report Cards. It is important to note that when using step counts to report on the adherence to physical activity guidelines, the 12,000-step target should be met on a *daily* basis; the goal is not an average of 12,000 steps per day.



Provincial/Territorial Breakdown of Physical Activity Levels Among Canadian Children and Youth

CFLRI has released the 6th year (2010-11) of data from CANPLAY, which uses pedometers to measure physical activity in 5- to 19-year-olds across Canada. In 2010-11, the national average was 11,350 daily steps, which is equivalent to the average in 2005-06 but lower than the averages in 2006-07 through 2009-10 (Figure 7). Compared to the national average, there are few provincial and territorial differences. Children and youth in Newfoundland and Labrador generally take fewer steps (10,779) while those in Nunavut take a greater number of daily steps on average (13,103) (Figure 8). It should be noted, however, that data collection differed slightly in Nunavut, as recruitment occurred within the school setting.

Figure 7. Average Daily Steps of 5- to 19-Year-Olds in Canada Over Time, 2005-11 (Source: CANPLAY, CFLRI).

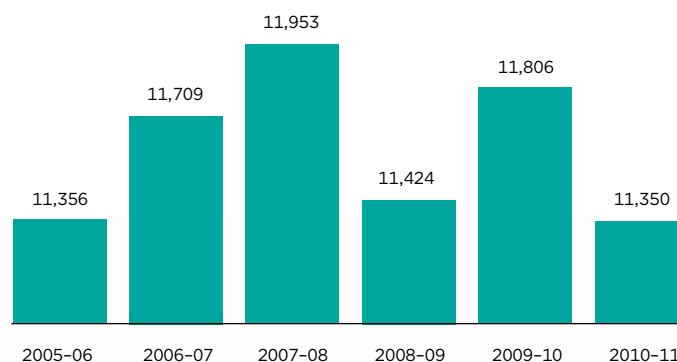
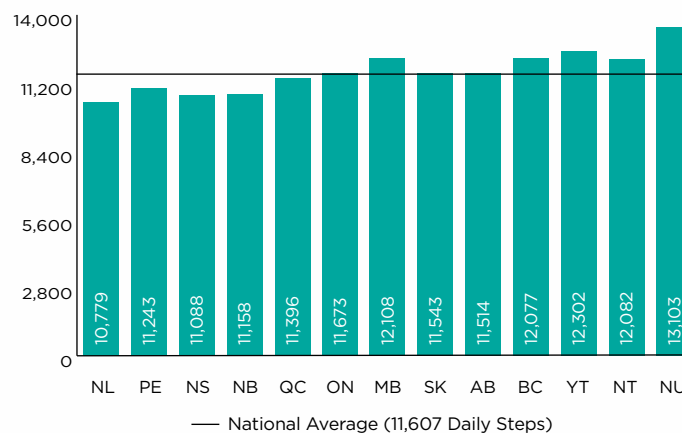


Figure 8. Average Daily Steps of Children and Youth by Province and Territory, 2009-11 (Source: 2009-11 CANPLAY, CFLRI).



The Daily Pattern of Physical Activity in Canadian Children and Youth

Knowing when children and youth accumulate MVPA over the course of a day and week is important for several reasons, including improved understanding of why overall physical activity levels are what they are. An awareness of daily physical activity patterns may also lead to more targeted physical activity promotion strategies or policies.

A recent analysis from the 2007-09 CHMS on the daily and weekly physical activity patterns of Canadian children and youth reinforces the importance of the after-school period as a window of opportunity for the accumulation of physical activity (Table 2). For example, Canadian children and youth are more physically active on weekdays (57 minutes of daily MVPA on average) than weekend days (47 minutes of daily MVPA on average) and accumulate the bulk of their physical activity between 11 a.m. and 5 p.m., with peaks occurring at lunchtime and just after school. The most physically active time of the day for younger children (6- to 10-year-olds) is lunchtime (11:00 a.m. to 12:59 p.m.), when boys and girls accumulate an average of 13.1 and 11.4 minutes of MVPA respectively. For older children and youth, the peak in physical activity participation is in the after-school period (3:00 to 4:59 p.m.), when boys and girls accumulate an average of 10.8 and 9.2 minutes of MVPA respectively. The most physically active children and youth for each gender and group (> 66th percentile for daily MVPA) accumulate more minutes of MVPA in every period of the day, with the largest difference occurring during the after-school period (i.e., 3:00 to 4:59 p.m.) (Figure 9).²¹

Figure 9. Average Daily Minutes of MVPA by Activity Tercile and Time of Day, Household Population Aged 6 to 19, Canada (Source: 2007-09 CHMS, Statistics Canada²¹).

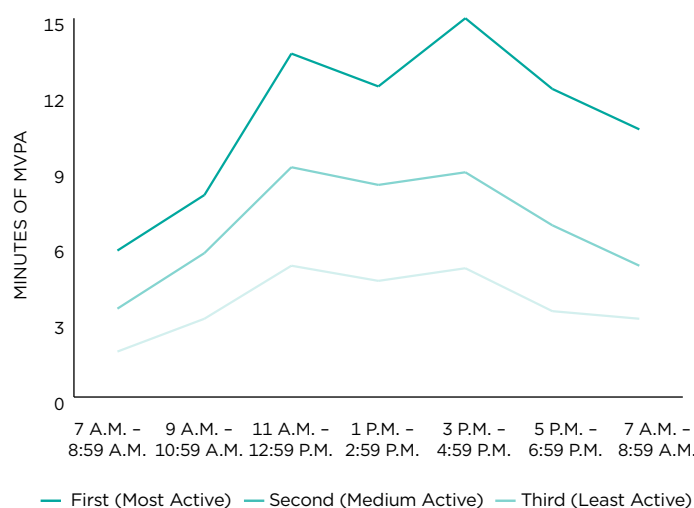


Table 2. Average Daily Minutes of MVPA by Age Group, Sex and Time of Day (Source: 2007-09 CHMS, Statistics Canada).

AGE GROUP AND SEX	7:00 A.M. – 8:59 A.M.	9:00 A.M. – 10:59 A.M.	11:00 A.M. – 12:59 P.M.	1:00 P.M. – 2:59 P.M.	3:00 P.M. – 4:59 P.M.	5:00 P.M. – 6:59 P.M.	7:00 P.M. – 8:59 P.M.	9:00 P.M. – 6:59 A.M.
6 – 10 Boys Girls	4.0 3.1	9.0* 7.1	13.1 11.4	11.5 9.4	11.4 9.8	10.3 8.6	8.1† 6.8	†† 1.8†
11 – 14 Boys Girls	4.1 3.2	5.1 4.6	11.1 7.6	9.0 7.4	10.8 9.2	9.0 6.4	7.3 6.2	3.0 2.5†
15 – 19 Boys Girls	4.4 3.4	5.1* 3.2	7.9* 5.6	7.5 6.2	9.6 7.8	6.8 4.4	5.7 4.4	6.1 4.2

* Significantly different from females in the same age group ($p < 0.05$).

† Use with caution.

†† Too unreliable to be published.

The Physical Activity of Preschoolers

Early childhood is a critical period for the development of healthy, active living behaviours. Unfortunately, little is known about the physical activity levels of preschoolers. A small study (30 participants) in Ontario used accelerometers to measure the physical activity of 3- to 5-year-olds over 7 consecutive days and found that preschoolers accumulate 220 minutes of daily physical activity on average, 75 minutes of which (34%) is spent in MVPA. Preschoolers take 7,529 daily steps on average, and those getting more daily MVPA also take more daily steps.⁵¹ These results provide some evidence that preschoolers may be meeting the new Canadian Physical Activity Guidelines for the Early Years (Aged 0-4 Years), which recommend at least 180 minutes of physical activity per day at any intensity level (see page 6 for more information).

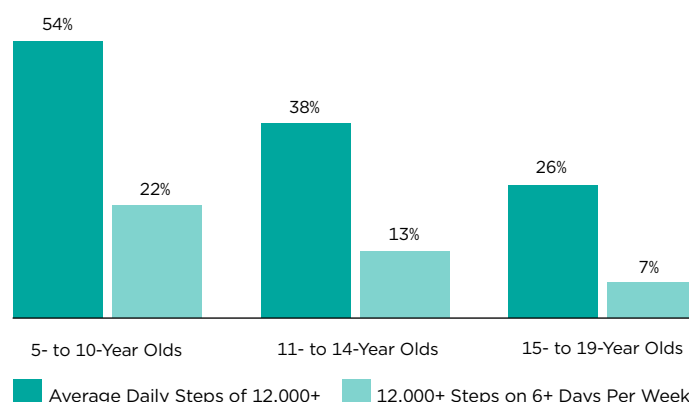
Parent Reports and Objective Methods of Physical Activity Measurement

An accurate assessment of the physical activity of Canadian children and youth is necessary for health surveillance and the evaluation of physical activity promotion strategies. In a recent study of 878 Canadian children and youth (6- to 19-year-olds), MVPA, sedentary behaviours and sleep duration were assessed by both parental report and accelerometers, and those numbers were then compared.⁵² Parents reported that their children and youth accumulated an average of 105 minutes of MVPA per day, 2.5 hours of screen time per day and 9.7 hours of sleep per day. According to the accelerometer measurements, youth accumulated an average of 63 minutes of MVPA per day, 7.6 hours of sedentary time per day and 10.1 hours of sleep per day. These disparate results highlight the importance of understanding the difference between parental report and accelerometry before using them interchangeably in health surveillance assessment,⁵² as well as the importance of continuing to target parents for physical activity awareness strategies and campaigns. Self- and parental-report measurements tend to capture the time spent moving above a given intensity cut-point. For example, a youth may report playing a hockey game for 60 minutes, but the accelerometer worn for that hour may record only 20 minutes of MVPA (since there are stoppages in play and the young person is sitting on the bench for a large proportion of the game). Though one measurement is not necessarily more correct than the other, it is important to acknowledge that a difference exists between these 2 measurements of physical activity.

Age- and Gender-Related Differences in Physical Activity

As shown in previous Report Cards, disparities in physical activity continue to exist across age and gender. Figure 10 depicts the drop in physical activity among 5- to 19-year-olds in Canada that occurs with increasing age (2009-11 CANPLAY). Other data reveal a 39% disparity in physical activity between genders (2009-10 HBSC). More than a quarter (28%) of 10- to 16-year-old boys in Canada reported the accumulation of at least 60 minutes of MVPA on each of the past 7 days, compared to only 17% of girls. Similar trends can also be found in the 2010-11 CANPLAY data, where boys were found to take more daily steps than girls and younger children to take more daily steps than older children.

Figure 10. The Percentage of Canadian Children and Youth Who Take at Least 12,000 Steps Per Day on Average and Who Take at Least 12,000 Steps on 6 or More Days of the Week (Source: 2009-11 CANPLAY, CFLRI).





Organized Sport & Physical Activity Participation

THE GRADE FOR THE ORGANIZED SPORT & PHYSICAL ACTIVITY PARTICIPATION INDICATOR IS A C FOR THE 6TH YEAR IN A ROW.

While well over half of children and youth in Canada participate in organized sport or physical activity, persistent and substantial socio-economic disparities continue to hamper improvements to the grade.

YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	C+	C-	C	C	C	C	C	C

KEY FINDINGS

- > 75% of kids aged 5–19 participate in organized physical activities or sport (2009–11 CANPLAY, CFLRI).
 - A provincial/territorial breakdown of participation in organized physical activity or sport is available in Figure 11.
- > Kids from higher-income families have a 25% higher participation rate than those from lower-income families (2010 PAM, CFLRI).
- > One soccer and baseball/softball study found that only 46% of practice time is spent being moderately or vigorously active.⁵³
- > Children and youth who participate in organized physical activities or sport take more daily steps than those who do not participate (2009–11 CANPLAY, CFLRI).
- > Among 5- to 17-year-olds in Canada who participate in organized sports, the majority of boys (85%) and girls (79%) report participating at least 2 days per week. Half of boys and 43% of girls reportedly participated in all 12 months of the previous year (2010 PAM, CFLRI).

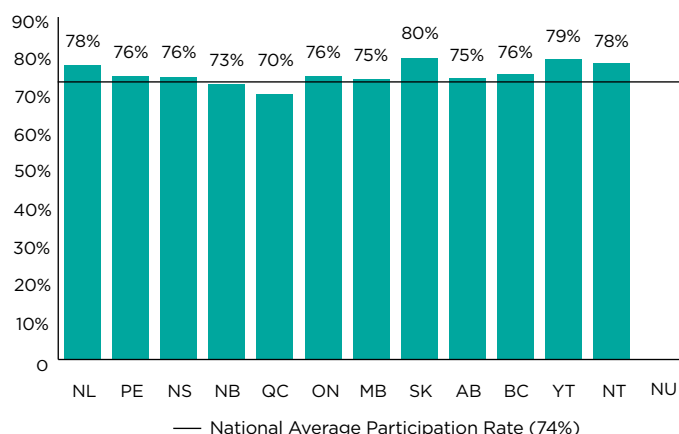
RECOMMENDATIONS

- > Coaches and program leaders should organize practices in order to ensure less idle time and more MVPA outside of necessary instructional time.
- > Work with sport associations is required to devise ways for kids to be more active when participating in sports and organized activities.
- > Youth-serving organizations should develop strategies to counter the dropout rate in organized sport and physical activities among teenagers.

RESEARCH GAPS

- > More insight is needed into the contribution that participation in organized sport and physical activity by Canadian children and youth contributes to their daily MVPA and helps them meet the Canadian Physical Activity Guidelines.
- > Data on the frequency of sport participation, and participation numbers by national sport organizations, would greatly improve tracking of sport participation in Canada.
- > Evidence is needed on whether the socio-economic disparity of sport participation in children and youth is changing over time.

Figure 11. Percentage of 5- to 19-Year-Olds Who Participate in Organized Physical Activities or Sport (Source: 2009-11 CANPLAY CFLRI). Note: Data for Nunavut are Unavailable.



Physical activity occurs in many different contexts for children and youth, including structured (e.g., physical education classes) and unstructured environments (e.g., active play, active transportation to school).³⁷ The physical activity captured by the Organized Sport & Physical Activity Participation indicator examines the physical activity that children and youth accumulate in structured environments.

Recent research with Grades 5-8 students in Saskatoon who self-reported their physical activity reveals that children who play sports or physical activities with coaches or instructors more than 4 times per week are 40% more likely than their counterparts to get more than 1 hour of daily physical activity of somewhat hard intensity or higher.⁵⁴ New international research also suggests that organized sport participation is associated with a 2.1% reduction in body mass index (BMI) among children.⁵⁵ Despite these results, the question of how much physical activity children and youth get while participating in organized sport and physical activity remains unsettled.

How Much Physical Activity Do Children and Youth Get in Organized Sport and Physical Activity?

Previous research has shown that organized sport participation may contribute as much as 60% to the daily MVPA of children and youth.⁵³ Several research studies in the last year have measured the extent to which organized sport contributes to total daily energy expenditure and MVPA in children and youth. For example, among a sample of 13- to 16-year-old boys in Portugal, 11-13% of total daily energy expenditure and 35-42% of daily MVPA was achieved through participation in organized sport. Thirteen to 16-year-old boys who participated in organized sport also had higher levels of daily physical activity and MVPA, and lower levels of sedentary pursuits than similar-aged boys who did not participate in organized sport.⁵⁶ These results confirm that participation in organized sport has a meaningful influence on overall physical activity levels, at least in male adolescents.

A US-based study used accelerometers to measure the physical activity of 7- to 14-year-olds during soccer or baseball/softball practices. Practice times ranged from 40 to 130 minutes for soccer practice and from 35 to 217 minutes for baseball/softball practice. Overall, the participants spent 46% of practice time in MVPA. Participants who were 7 to 10 years old, boys and soccer players accumulated significantly more MVPA per practice than their counterparts (11- to 14-year-olds, girls, baseball/softball players). Overall, 24% of participants accumulated at least 60 minutes of MVPA during their practice. However, fewer than 10% of 11- to 14-year-olds accumulated this much physical activity and only 2% of girls in softball practice accumulated at least 60 minutes of MVPA.⁵³

In another US study that used accelerometers to measure physical activity in 7- to 10-year-olds during a 50-minute soccer game, 49% of the match (25 minutes) was spent being sedentary and only 33% (17 minutes) in MVPA. Those soccer players who were overweight/obese (23%) spent several minutes more being sedentary and several minutes less in MVPA compared to normal-weight players.⁵⁷

These results suggest that while organized sport participation can be an important contributor to physical activity in children and youth, its benefits may depend on several factors including age, gender and the type of sport. While sport is very important for motor skill development even if time spent in MVPA is minimal, it is important for parents to realize that a significant proportion of time spent in organized sport is not spent in MVPA, and that enrolment of their children and youth in organized sport does not guarantee they will accumulate enough physical activity to meet the Canadian Physical Activity Guidelines, which recommend at least 60 minutes of MVPA each day of the week.⁵⁸

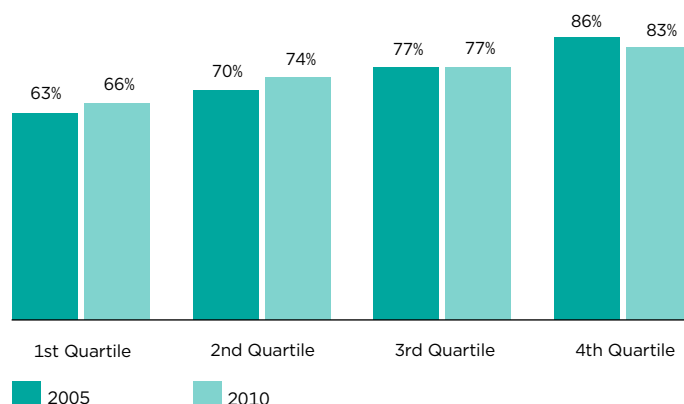
The Health and Societal Impacts of Sport in Indigenous Youth

At the 2008 North American Indigenous Games (NAIG) in Duncan, British Columbia, a survey that explored the health and societal impacts of the Games was delivered to 297 of the athletes. Based on their responses, the impact of the NAIG extended beyond sport. For example, athletes reporting prior substance abuse agreed or strongly agreed that NAIG helped them quit illicit drug use (84%), smoking (78%) and alcohol use (73%). Youth participating in the NAIG reported feeling more respect for themselves (89% agreed or strongly agreed) and their community (88% agreed or strongly agreed).⁵⁹

Disparities

As mentioned in the rationale for this indicator's grade, the persistent socio-economic disparity in sport participation continues to hamper improvements to the grade. Figure 12 illustrates children and youth's participation in sport by income in 2005 and 2010, and shows that a similar relationship between participation and income persists between the 2 time points. For example, in both 2005 and 2010, children and youth in families earning the highest incomes (4th quartile) had at least a 25% higher participation rate in sport than children and youth in families earning the lowest incomes (1st quartile).

Figure 12. Sport Participation Rates in Canadian Children and Youth by Family Income Quartiles (2005 and 2010 PAM, CFLRI).



The Role Sport Organizations Can Play in Helping Children and Youth Meet the Canadian Physical Activity Guidelines

The International Olympic Committee Consensus Statement on the Health and Fitness of Young People Through Physical Activity and Sport recommends that sport organizations strengthen their role in the promotion of physical activity and sport for health and fitness in youth in the following ways:⁶⁰

- Ensure that sport programs include youth-oriented activities to engage and retain young athletes.
- Educate sport coaches about the need to incorporate appropriate health-related fitness training in relation to growth and maturation.
- Identify and lower the barriers to participation in sport.
- Collaborate with youth, parents, school personnel and community programs to design and deliver sport programs that attract and retain young people.
- Foster collaboration with international, national and regional physical activity promotion networks.
- Evaluate and improve the quality and delivery of sport programs for young developing athletes.
- Encourage research into the efficacy and effectiveness of delivery of sport and physical activity for young people.

HIGH FIVE®

HIGH FIVE®, a division of Parks and Recreation Ontario, is Canada's only comprehensive quality standard for children's sport and recreation. HIGH FIVE® has identified 5 principles of healthy child development that are essential for quality programs:

- A caring adult
- Opportunity to play
- Make friends
- Master skills
- Participate

For more information, visit highfive.illogic.net.

F	Active Play & Leisure							
	THE GRADE FOR THE ACTIVE PLAY & LEISURE INDICATOR IS AN F FOR THE 3RD YEAR IN A ROW. In the absence of Canadian data on active play (unstructured physical activity), the fact that only 7% of Canadian children and youth are meeting the Canadian Physical Activity Guidelines on at least 6 days of the week suggests that very few young people are getting adequate amounts of active play.							
YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	-	-	-	INC	INC	F	F	F

KEY FINDINGS

- > 46% of kids aged 6-11 get 3 hours or less of active play (unstructured physical activity) per week, including weekends (2007-09 CHMS).
- > Based on parent-reported data, 5- to 17-year-olds in Canada get 7 hours and 23 minutes of physical activity per week while at home. This is down from 8 hours and 37 minutes per week in 2005, and 8 hours and 35 minutes per week in 2000 (2000, 2005, 2010 PAM, CFLRI).
- > Based on the best evidence available, there was a 25% decline in active play in 6- to 8-year-old children between 1981 and 1997.⁴¹
- > In an international study including Canadian respondents, 1 in 2 adults cite fear of exposure to child predators as the reason they restrict their children's outdoor play.⁴⁶

RECOMMENDATIONS

- > If your child has no free time, consider reducing the number of scheduled activities.
- > To increase neighbourhood safety, advocate for traffic-calming measures such as speed bumps and roundabouts, which have been shown to decrease pedestrian-vehicle accidents.
- > To reduce screen time, encourage children to spend time outdoors, every day, instead of in front of a TV or video games.

RESEARCH GAPS

- > Further research is required into the measurement of active play (e.g., What percentage of total MVPA is attributable to active play? What do children do during active play?). A persistent challenge is how researchers should assess active play since it consists of sporadic bouts of physical activity interspersed with rest periods.

What is Active Play?

The essential qualities of play in general have received unanimous agreement from researchers over the years. One of the most important qualities is fun or enjoyment. While fun does not assure the presence of play, it is a necessary or essential element. If an activity is not interpreted as fun, then it is not considered play.³⁴ Other essential elements of play include choice and control. For example, if a child wants to engage in an activity, freely chooses the activity and can tailor the activity to their own experiences, there is a good chance the activity is play. If aspects of the activity are under the control of others, the activity is not considered play even by young children.³⁴

Active play shares all of these essential qualities of play in general (i.e., fun, freely chosen, personally directed, spontaneous), but may differ in one important area: energy expenditure. While play in general involves some degree of physical spontaneity,³⁴ active play involves physical activity at energy costs well above resting levels³⁵ but often below “exercise” levels.

How Do Children Understand Active Play?

Active play comes in many different forms, varying with age and setting, and tends to occur in sporadic bouts interspersed with rest periods.³⁵ In a recent study, school-aged children from an Edmonton elementary school were interviewed about play preferences and most of their choices were active in nature. Preferences included outdoor activities, movement-based activities, playing with peers and play in re-purposed spaces (places not intended for play).⁶¹ A recent UK study also explored 10- to 11-year-olds’ perceptions of active play. Many thought of play in terms of a physical activity that was unstructured and that took place outdoors. When asked about activities they engaged in during active play, boys were more likely than girls to identify a specific physical activity. This may point to a gender disparity where girls value socialization more than physical activity during active play. Participants in this study rarely identified built playgrounds as the place where they played, which may be important for the development of interventions to increase active play. Adult-designed spaces do not appear to be ideal for active play.³⁵

Motivations for Active Play

In another study from the UK, 10- to 11-year-olds reported 4 main motivations for engaging in active play; these included socialization (“because I like being with my friends”), prevention of boredom (“because it’s boring at home sitting in front of the TV”), health benefits (“to keep fit”) and freedom (“we all want to be able to make sure we can sometimes do what we want – not what adults tell us to do”).³⁷



HULA HOOP

Child's Toy

Barriers to Active Play

The original decline in active play that took place prior to the 20th century is believed to be a consequence of cultural and technological shifts. As societies progressed from hunter-gatherer to industrialized cultures, work shifted to farming and factories, which likely displaced available time for active play. In more recent times (1955 onward), however, the decline in active play is believed to be partially explained by over-parenting, where control over activities is increasingly vested in parents to the detriment of children's active play.³⁹ Indeed, in a study of park-based physical activity among nearly 3,000 American children and youth (0- to 18-year-olds), the presence of a parent or non-parent supervising adult was associated with a lower likelihood of MVPA in children.⁶²

Available research suggests that the decline in active play over the past several years is related in large part to parental safety concerns. Parental safety concerns include:⁶¹

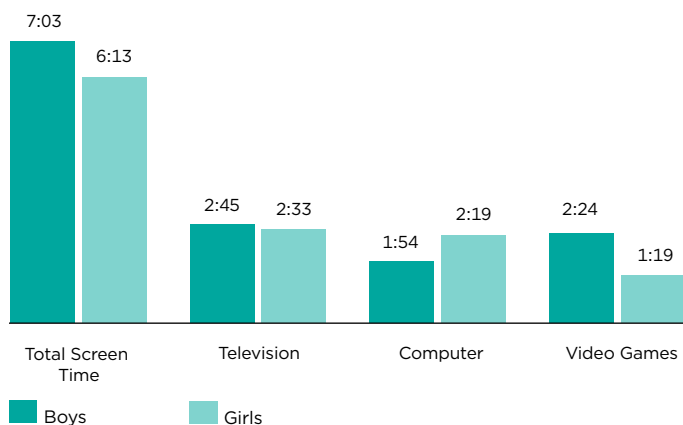
- Crime
- Traffic
- Neighbourhood danger (e.g., bullies, rundown buildings)
- Outdoor darkness
- Lack of supervision

Historically, many of these fears developed in the 1970s and 1980s when parents experienced panics about childhood.³⁸ This anxiety centred on fears about stranger abductions, sexual abuse and youth violence.⁶³ Many of these fears persist today. For example, in a small Canadian study in 2007, the majority of parents believed their neighbourhood was unsafe and felt neighbours could not be trusted to look after the parents' children.⁶⁴ In a UK study, 43% of adults felt that children under 14 years old should not be allowed outside unsupervised; 22% of adults felt they should not be allowed out unsupervised until they were 16 years old.⁴³

In a US study involving mothers, most participants admitted restricting their children's outdoor play, and 82% cited safety concerns as the primary reason for doing so.⁴² In the Play Report by IKEA (the largest international survey on child development and play, and that included participants from Canada), the most frequently cited reason for restricting outdoor play (49% of participants) was the parental fear that their children might be exposed to child predators.⁴⁶ These fears may be further exacerbated by the media and advertisers. Some researchers suggest that while incidents of crime against children are low – likely lower, in fact, than in the days when active play was much higher – extensive and repeated news coverage, which characterizes the Internet age in which we live, may reinforce parental concerns and consequent decisions to restrict active play.³⁹ Advertisers, who often appeal to status or fear, understand that parents are looking for highly controlled environments for their children, borne out of safety concerns. By appealing to parental fears, advertisers may be inadvertently reinforcing safety concerns even though this is contrary to reality, thus further compounding the problem of parental-enforced reductions in active play.⁶⁵ In an effort to keep children safe by keeping them indoors, the emergence of cyber-bullying and cyber-abductions has occurred while outdoor crime statistics have not risen and even possibly decreased. Thus, the net result of our over-parenting behaviours is decreased physical activity, decreased fresh air and sunlight exposure, increased obesity and increased risk of harm from cyber-crime.

Another significant barrier to active play, which parents can influence, is screen time. Excessive screen time likely displaces time and opportunities for active play. New data from the HBSC survey that are presented in this year's Report Card continue to reveal a disturbing trend in Canadian children and youth: 10- to 16-year-olds are watching various screens (e.g., television, computers, video games) for an average of 6 hours and 37 minutes per day (Figure 13). For more information on screen time, see the Screen-Based Sedentary Behaviours indicator on page 31.

Figure 13. Average Daily Time (Hours:Minutes) Spent in Screen-Related Activities Among 10- to 16-Year-Olds in Canada by Gender and Screen Type (Source: 2009-10 HBSC).



D+

Active Transportation

THE GRADE FOR THE ACTIVE TRANSPORTATION INDICATOR IS A D+ due to the fact that less than half of Canadian children and youth use active modes of transportation to and/or from school. While it would be ideal for all children and youth to actively transport to and from school, this may not be considered a practical option by many parents due to distance or other constraints.

YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	-	D	-	D	D	D	D	D+

KEY FINDINGS

- > 35% of kids aged 10-16 report using active transportation on the main part of their trip to school (33% walk, 2% bicycle) (Table 3) (2009-10 HBSC).
- > The percentage of Canadian kids who walk or wheel to school peaks at age 10 (approximately 35%) and then drops off (Figure 14) (1996-2001 National Longitudinal Survey of Children and Youth [NLSCY]⁶⁶).
- > However, there is likely much spatial and temporal variation in rates of walking to/from school across Canada.⁶⁷ For example, walking to school is the most common mode of transport for elementary school children living in the inner-urban areas of Toronto while driving is more dominant in the suburban areas. Across Canada, there is typically a shift in the afternoon period, as more children walk home than walk to school.⁶⁸

RECOMMENDATIONS

- > Children and youth should be encouraged to use various forms of active transportation (e.g., walk, cycle, skate, skateboard, scooter) to get to and from school as well as to and from the various activities they do outside of school during the week and on the weekend.
- > Efforts should be expanded to implement Active and Safe Routes to School programs in all communities.
- > Parents and kids should consider active transportation to other destinations besides school (e.g., sport and recreational activities, parks and playgrounds, shopping, friends' houses).

RESEARCH GAPS

- > More Canadian research is needed on active transportation interventions to promote physical activity in children and youth of different ages.
- > Further research is needed to understand the facilitators and barriers to active transportation.

Figure 14. Percentage of 10- to 16-Year-Olds in Canada, by Grade, Who Use Active Transportation (Walking or Bicycling) to Get to and From School (Source: 2009-10 HBSC).

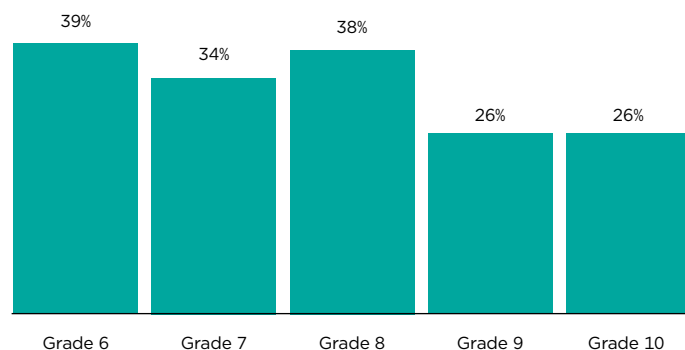


Table 3. Mode of Transportation to School Among Urban-Dwelling (Residing in a Municipality with $\geq 10,000$ Residents) Grades 6-10 Students in Canada (Source: 2009-10 HBSC).

MODE OF TRANSPORTATION TO SCHOOL	ALL URBAN YOUTH	URBAN YOUTH WHO LIVE ≤ 1.6 KM FROM SCHOOL	URBAN YOUTH WHO LIVE 1.6-3.2 KM FROM SCHOOL	URBAN YOUTH WHO LIVE > 3.2 KM FROM SCHOOL
WALK	33%	59%	11%	5%
BIKE	2%	3%	1%	1%
BUS	41%	16%	58%	73%
CAR	24%	23%	30%	21%

Factors Associated with Active Transportation

Current theoretical models propose a wide array of factors as having an influence on the choice of travel modes. These include personal characteristics (e.g., enjoyment of walking or cycling), the social environment (e.g., parent and peer attitudes toward active transportation), public policies (e.g., school policies, municipal bylaws), the built environment (e.g., sidewalks and bicycle paths) and the physical environment (e.g., the weather).⁶⁹⁻⁷⁰ For example, a new model developed by Australian researchers incorporates the observable environment, parental perceptions and decisions regarding their children's travel mode, and the perceptions and decisions of children and youth regarding active transportation within their family context. The authors speculate that the objective environment (the physical, political, social, cultural and economic environments) and socio-demographic characteristics influence the perceptions of parents and children/youth alike, which, in turn, lead to the choice of travel mode. Further, events occurring during active trips may lead to a reconsideration of earlier travel mode decisions.

A recent systematic review of 14 studies that used Geographic Information Systems revealed that the distance between home and school is the most important predictor of choosing active transportation in youth.⁷¹ This review also reported that factors such as residential density and land-use mix, which are strongly associated with active transportation in adults, are not consistently associated with active transportation in children and youth.

Recent Canadian studies have revealed that living in an urban area, in an area not considered ideal for the rearing of children and youth, in a single-parent family or in a family with a lower socio-economic status is associated with a greater likelihood of using active transportation.^{66,72} In contrast, another Canadian study found that reasons for driving children to/from school included inclement weather, perceived convenience of driving and trip chains (parents driving their kids to school on the way to work).⁷³ Among adolescents, those who have some input into the decision-making process are more likely to use active transportation, while those with a part-time job are less likely to use active transportation.⁷⁴

Health Benefits of Active Transportation

In 2011, the first randomized controlled trial to assess the impact of a “walking school bus” intervention on physical activity levels was published.⁷⁵ Over the course of the school year, daily time spent in MVPA increased by 2.2 minutes in the group of participants who took the walking school bus to school, while it decreased by 4.8 minutes in the group that did not use the walking school bus. The overall effect is approximately 35 minutes of MVPA per week. These findings are consistent with systematic reviews that report significantly greater physical activity levels in children using active transportation.⁷⁶⁻⁷⁸

Based on a recent systematic review, it appears there is a consistent positive association between bicycling to school and children’s fitness.⁷⁹ Furthermore, a Danish longitudinal study has found that 15-year-olds who bicycle to/from school have lower concentrations of fasting glucose and triglycerides in their blood, and are less likely to be resistant to insulin, which suggests they may be less likely to develop type 2 diabetes. Overall, children and youth who bicycle to/from school also have a lower risk of cardiovascular disease.⁸⁰

However, it remains unclear whether children who walk to/from school are fitter than those who are driven to school.⁷⁹ It has been suggested that, in contrast to bicycling, walking for transportation may not be sufficiently intense to increase cardiovascular fitness in children and youth.⁸¹

The relationship between active transportation and indicators of body composition such as BMI and waist circumference remains unclear. Earlier reviews report that most studies have not found differences in body composition between children who use active transportation and those who do not.⁷⁶⁻⁷⁷ In contrast, a more recent review suggests that children who use active transportation are less likely to be overweight or obese.⁷⁸ A major limitation of current studies on this topic is the failure to account for compensatory behaviours. It is possible that children and youth “compensate” for using active transportation by eating more or spending more time in sedentary pursuits during the remainder of the day. In addition, active transportation tends to be more common in children from lower-income households^{66,72} while low income is associated with an elevated risk of overweight or obesity.⁸²⁻⁸³

Active Transportation Interventions

An increasing number of Canadian schools are implementing school travel plans as a strategy to promote active transportation (e.g., www.saferoutestoschool.ca/oldsite/schooltravel.html, www.velo.qc.ca/transport-actif/Mon-ecole-a-pied-a-velo). A pilot evaluation of the Active and Safe Routes to School program in 4 Canadian provinces showed a 2.1 percentage point increase in the mode share of active transportation (from 43.8% to 45.9%). In addition, 13% of parents reported driving less as a result of the implementation of the school travel plan.⁷³ In Quebec, a preliminary evaluation of the On the Move to School! program showed a 14.2% increase in active transportation among children who were involved in the program activities and lived 0.5-1.0 kilometres away from their school.⁸⁴ The short distance used in the latter evaluation may explain some of the difference in the impact of the 2 programs.

In New Zealand, an evaluation of school travel plans implemented in 33 elementary schools demonstrated a 5.9% increase in active transportation.⁸⁵ The increase was greater in smaller schools, in those where there was a higher percentage of children using active transportation before the implementation of the school travel plans and in those where the plan had been implemented for a longer period of time.

A systematic review of 14 intervention studies on active transportation to school was published in 2011.⁸⁶ These interventions were delivered in the US, UK and Australia. Ten of these studies reported an increase in active transportation and/or physical activity, but the effect of the interventions varied considerably (from 3% to 64%). Interventions that focused on a specific goal (e.g., increasing active transportation) were more effective than those that had a broader focus. Nevertheless, the quality of evidence was rated as low because the studies had important weaknesses. First, several interventions were limited by the absence of control schools (i.e., schools without an active transportation intervention). Second, none of them had study samples that were representative of the population. Third, most interventions did not take into account other variables that might affect the likelihood of using active transportation. Fourth, there were high dropout rates in many of these interventions. Moreover, only a few studies have examined the impact of the distance between home and school, which is likely to have a major impact on both the likelihood of using active transportation and the quantity of physical activity accumulated while using active modes of transportation.

Despite current efforts, the majority of Canadian schools – especially high schools and rural schools – do not have any programs or policies that promote active transportation such as walk-to-school days, walking school buses or programs that identify safe routes to school. In addition, 42% of schools are located on high-speed roads (≥ 60 km/h) and 14% do not have a sidewalk leading to school.⁸⁷ Further, low parental awareness may hinder the effectiveness of active transportation programs. Interestingly, a survey of parents in the Toronto/Hamilton region revealed that children of parents who are aware of such programs are twice as likely to use active transportation.⁸⁸

What Students Think Would Encourage Them to Walk or Bike to School

In the 2009–10 HBSC, students in Grades 6 to 10 were asked what would make walking or biking to school better, or what would encourage them to walk or bike to school. Half of students said having safe places to leave bicycles at school was very important, 44% said not being worried about bullying or being attacked was very important and 38% said having safer places to cross the road was very important. Table 4 provides a complete summary of what students considered very important, important and not important.

Table 4. Perceptions of Grades 6-10 Students in Canada About What Would Make Walking or Bicycling to School Better, or Encourage Them to Walk or Bicycle to School (2009-10 HBSC).

	VERY IMPORTANT (%)	IMPORTANT (%)	NOT IMPORTANT (%)
A Continuous Pathway for Walking or Cycling	29	49	22
Wider Sidewalks and Trails	28	43	29
Less Traffic	29	39	32
Safe Places to Leave Bicycles at School	50	35	15
Safer Places to Cross The Road	38	39	23
People to Walk With	34	39	27
Not Worried About Being Bullied or Attacked	44	27	29

What Would Encourage Parents to Let Their Children and Youth Walk to School

At baseline of the Canadian school travel planning intervention,⁶⁸ 2,022 parents who drove their child to elementary school, and who lived within 1.5 kilometres of school, were asked what would encourage them to let their child walk to school. The most common response was if their child did not walk alone (53%), followed by reduced traffic dangers (34%), safer walking routes (27%) and if they did not live so far away (16%). These findings suggest a need for interventions that provide adult supervision.

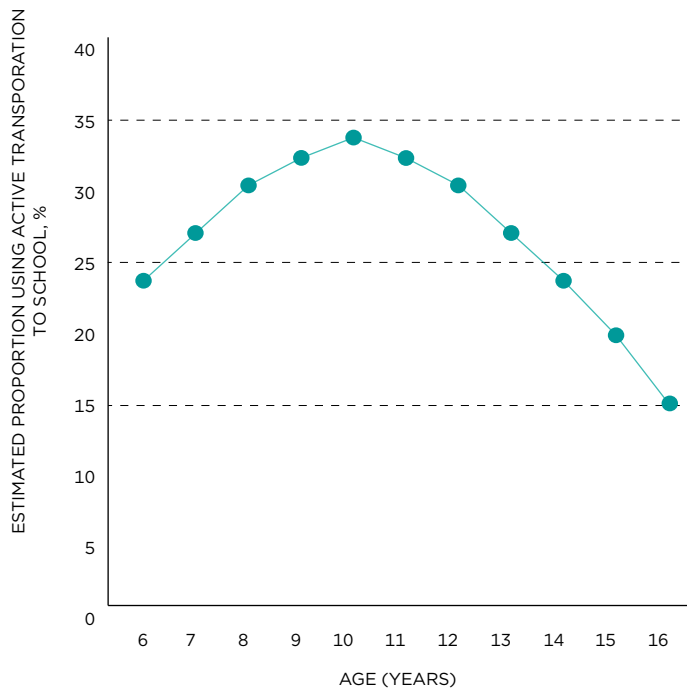
Government Investment in Active Transportation Infrastructure

Between 2005 and 2010, \$34,324,388 has been allocated from the Gas Tax Fund in Canada to support 207 active transportation projects across Canada including bike lanes, sidewalks, shorelines, walkways, improvements to parks, bike and trail networks, and traffic education campaigns. This allocation represents almost 1% of Gas Tax Fund spending.⁸⁹ For more information on how the Gas Tax Fund has been allocated by province/territory, see the Federal Government Investment indicator on page 74.

Disparities

Disparities in active transportation to school are clearly seen across age (Figure 15). The percentage of Canadian children who are likely to use active transportation to school peaks at 10 years of age (approximately 35%) and decreases markedly afterwards (1996–2001 NLSCY⁶⁶).

Figure 15. Association Between Age and Active Transportation to School Among Children Attending Public Schools and Participating (Source: Adapted From 1996–2001 NLSCY⁶⁶).



TIRE SWING
Child's Toy



SEDENTARY **BEHAVIOUR**



SKATEBOARD

Child's Activity

F

Screen-Based Sedentary Behaviours

THE GRADE FOR THE SCREEN-BASED SEDENTARY BEHAVIOURS INDICATOR IS AN F FOR THE 4TH YEAR IN A ROW due to the fact that the best available data (2007-09 CHMS, 2009-10 HBSC) suggest that the vast majority of Canadian children and youth are getting too much screen time.

YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	C-	D-	D-	D	F	F	F	F

KEY FINDINGS

- > Children and youth get an average of 7 hours and 48 minutes of screen time per day.⁴⁷
- > Only 19% of kids aged 10-16 report meeting the Canadian Sedentary Behaviour Guidelines, which recommend no more than 2 hours of recreational screen time per day (2009-10 HBSC).
 - 17% met the recommendation from the Guidelines in 2006.
- > 10- to 16-year-olds in Canada get an average of 6 hours and 37 minutes of screen time per day. The largest source of screen time is television (2 hours and 39 minutes) followed by computers (2 hours and 7 minutes) and video games (1 hour and 51 minutes) (2009-10 HBSC).

RECOMMENDATIONS

- > There is a need to increase awareness of the recently released Canadian Sedentary Behaviour Guidelines and of the ill health effects of excessive amounts of sedentary behaviour.

- > Children and adolescents need to be encouraged to interrupt their sedentary behaviours, perhaps with the suggestion that after every hour they spend sitting or reclining, whether doing homework or playing video games, they should get up and move – even if only for a short bit of time.
- > Parents should implement household rules on screen time and provide alternative opportunities for active play, sport and physical activity participation.

RESEARCH GAPS

- > Research is needed on the prevalence, correlates and health consequences of screen-based multi-tasking.
- > Research is required to understand the behaviour dynamics between active gaming and passive (seated) gaming. Does one displace the other? Or does overall screen time just increase? Does the dynamic differ by age and/or gender?
- > Intervention trials are needed to understand both how to reduce screen time, and the metabolic benefits that come from reducing screen time.

Negative Health Effects of Screen Time in Children and Youth

There is evidence suggesting that screen time, such as television viewing, has adverse effects on physical health, health behaviours and socio-cognitive outcomes.⁹⁰ In a recent study of 282 overweight or obese 14- to 18-year-olds, seated video gaming was associated with elevated blood pressure and blood lipids,⁹¹ which are risk factors for cardiovascular disease. Another recent study involving healthy, normal-weight teenage boys found a single session of video game play to be associated with increased food intake.⁹² These results provide support for reducing time spent playing seated video games as a possible means to promote overall health and to reduce the impact of cardiovascular disease risk factors among children and youth.

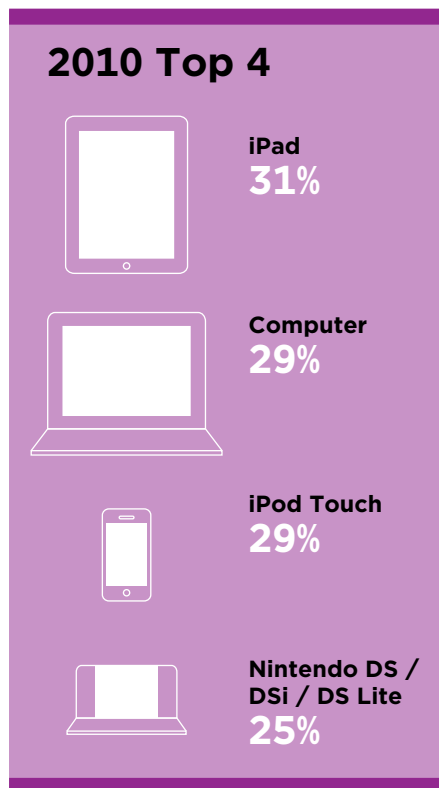
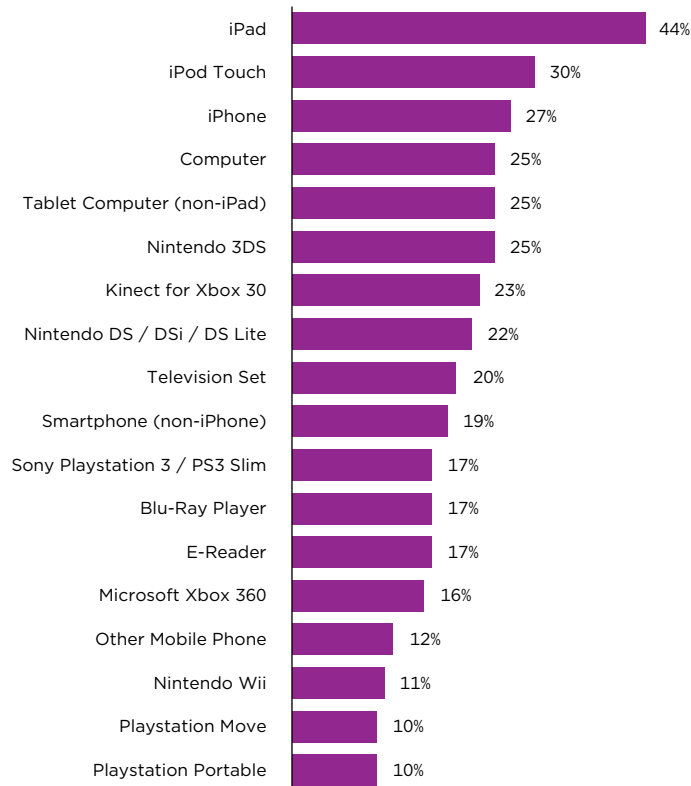
In a study of Grades 6-10 students in Canada who were asked the number of hours spent per week watching television, playing video games and using the computer, video game use and computer use were associated with violence (engaged in 2 or more physical fights in the previous year and/or perpetration of at least 2-3 monthly episodes of bullying).⁹³

iHoliday

According to research from Nielsen, 6- to 12-year-olds in the US had screens atop their 2011 Christmas wish lists (Figure 16).⁹⁴

Figure 16. 2011 Wishlists of 6- to 12-Year-Olds in the US (Source: Adapted From Nielsen).

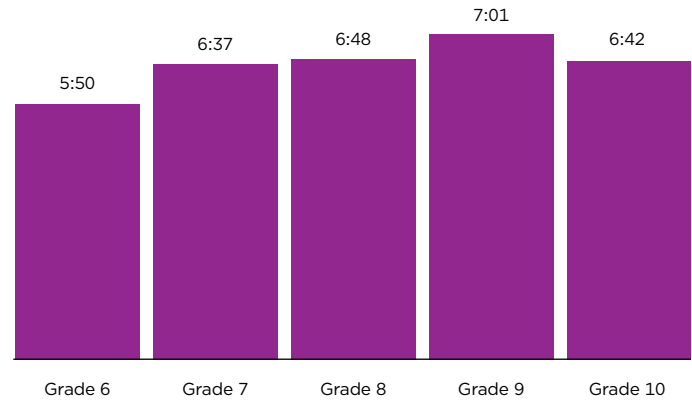
Interest in buying in the next 6 months: (Kids 6-12)



Disparities

While screen time for all 10- to 16-year-olds in Canada is alarmingly high (6 hours and 37 minutes per day), there is a gender disparity. Boys get an average of 7 hours and 3 minutes of screen time per day, which is almost 1 hour more than what girls receive (6 hours and 13 minutes). Boys and girls spend similar amounts of time watching television, but boys outpace girls in video game playing by more than 1 hour per day (see Figure 13 on page 24; 2009-10 HBSC). There are also age-related disparities, with Grade 6 students getting the least amount of screen time per day (5 hours and 50 minutes) and Grade 9 students getting the greatest amount of screen time per day (7 hours and 1 minute) (Figure 17).

Figure 17. Average Daily Time (Hours:Minutes) Spent in Screen-Related Activities Among 10- to 16-Year-Olds in Canada by Grade (Source: 2009-10 HBSC).



BICYCLE
Child's Activity

INC

Non-Screen Sedentary Behaviours

THE GRADE FOR THE NON-SCREEN SEDENTARY BEHAVIOURS INDICATOR IS AN INC (INCOMPLETE) because of a lack of data and a relatively poor understanding of the determinants and health consequences of such behaviours. Non-screen sedentary behaviours include passive modes of travel (e.g., riding in a car), reading and eating. Some sedentary behaviour in our daily lives is inevitable, but little is known about how much is too much and whether the pattern of accumulation across the day matters for health.

YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	-	-	-	-	-	-	INC	INC

KEY FINDINGS

- > Although it is difficult to separate out non-screen behaviours, kids under age 6 spend 73-84% of their waking hours sedentary, and kids aged 6-19 spend 62% of their free time (after school and weekends) sedentary (2007-09 CHMS).¹²⁻¹³
- > Numerous studies suggest that high levels of sedentary behaviour increase health risks in kids regardless of how active they are.⁹⁵⁻⁹⁹

RECOMMENDATIONS

- > There is a need to increase awareness of the recently released Canadian Sedentary Behaviour Guidelines.
- > Children and adolescents need to be encouraged to interrupt their sedentary behaviours, perhaps with the suggestion that after every hour they spend sitting or reclining, whether doing homework or playing video games, they should get up and move – even if only for a short bit of time.

RESEARCH GAPS

- > Research on time spent in non-screen sedentary behaviours is needed. In particular, research is required to understand the correlates and determinants of non-screen sedentary behaviours, the health consequences of various non-screen sedentary behaviours, age and sex differences in these behaviours, and feasible intervention strategies to reduce harmful non-screen sedentary behaviours.

Non-screen sedentary behaviours continue to be a relatively under-researched area. However, some regional data are available from the Keeping Pace provincial surveillance study of physical activity and dietary intake in Nova Scotia, which was collected in 2009-10. Grades 3, 7 and 11 students were asked about some non-screen sedentary behaviours. A majority of students reported spending 1 hour or less on homework on a typical weekday or weekend day. Similarly, a majority of students reported spending 1 hour or less sitting (e.g., listening to music, chatting, hanging out) on a typical weekday, except among Grade 11 students, where the majority spent 4 hours or more sitting. Finally, a majority of students reported spending 1 hour or less riding in a vehicle either on weekdays or weekend days.

Standardized Use of the Terms “Sedentary” and “Sedentary Behaviours”

More than 50 sedentary behaviour researchers from around the world, who belong to the recently formed Sedentary Behaviour Research Network, served as signatories to the proposal for standardized definitions of “sedentary” and “sedentary behaviours.” Recently published in the journal *Applied Physiology, Metabolism and Nutrition*,¹⁰⁰ the proposal is as follows:

Sedentary behaviour should be defined as any waking behaviour characterized by an energy expenditure <1.5 METs (metabolic equivalent of task) while in a sitting or reclining posture. In contrast, the term “inactive” should be used to describe those who are performing insufficient amounts of MVPA (i.e., not meeting specified physical activity guidelines).

Sedentary Behaviour Research Network

Within the last year, the Healthy Active Living and Obesity Research Group at the Children’s Hospital of Eastern Ontario Research Institute has spearheaded the creation of the Sedentary Behaviour Research Network (SBRN, www.sedentarybehaviour.org), which is an international scholarly organization dedicated to the study of sedentary behaviour as an independent risk factor for non-communicable disease development and other adverse health outcomes, separate and distinct from physical activity. SBRN currently has more than 200 members including prominent sedentary behaviour researchers from around the world, a list-serve for the discussion of sedentary behaviour research, and a research database of 100+ articles. To join SBRN, visit www.sedentarybehaviour.org/how-to-join.



SCHOOL AND CHILDCARE SETTINGS



In this year's Report Card, the name for this category of indicators has changed from School to School and Childcare Settings, drawing attention to the fact that this section also includes data on childcare facilities - the "school" equivalent for the early years - when available.

FLYING DISC

Child's Toy



Physical Education

THE GRADE FOR THE PHYSICAL EDUCATION (PE) INDICATOR IS A C. This grade reflects a slight improvement in the quantity and quality of PE; however, generally speaking, less than half of elementary and middle schools in Canada report that their students are getting at least 150 minutes of PE per week as recommended by Physical & Health Education Canada.

YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	F	-	-	-	C-	C-	C-	C

KEY FINDINGS

- > 67% of schools report that almost all of their students take PE classes from a PE specialist (2011 Opportunities for Physical Activity at School Survey, CFLRI).
- > The proportion of students who get the recommended 150 minutes of PE per week ranges from 15-65% across school grades (2011 Opportunities for Physical Activity at School Survey, CFLRI).
 - There are statistically significant increases in the percentage of schools reporting at least 150 minutes per week of PE per week in some grades (Grade 6 and lower) between 2006 and 2011 (2006 and 2011 Opportunities for Physical Activity at School Survey, CFLRI).
 - Canadian schools average from 88.7 minutes of PE per week (Kindergarten) to 169.2 minutes of PE per week (Grades 11-12). However, the percentage of students taking at least 1 PE class per week drops significantly in higher secondary grades (57% among Grades 11-12 students) compared to other grades (98% in Kindergarten, 99% in Grades 1-8, 84% in Grades 9-10 and 57% in Grades 11-12) (Figure 18) (2011 Opportunities for Physical Activity at School Survey, CFLRI). In addition, many secondary schools offer courses in semester, meaning that many students receive PE for only half the school year.

- > 31% of Canadian students receive regular PE (4-5 times per week) from a PE specialist (2011 Opportunities for Physical Activity at School Survey, CFLRI).

RECOMMENDATIONS

- > School district administrators need to elevate the priority of quality daily PE.
- > School district administrators should continue to employ PE specialists to teach PE for all grade levels.

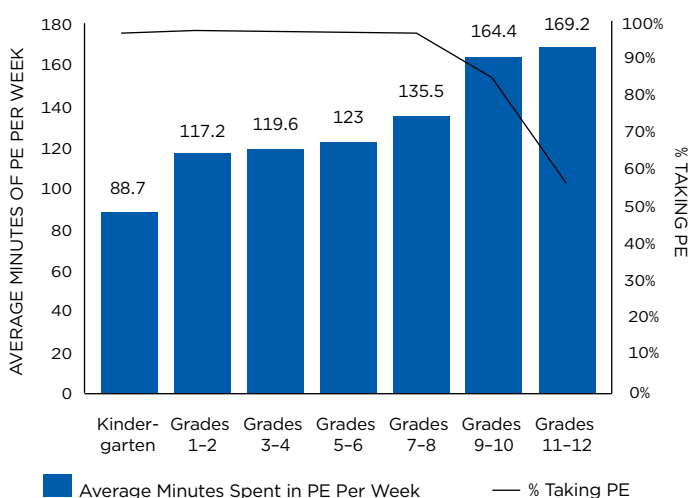
RESEARCH GAPS

- > Classroom-level surveillance data are needed on the content of PE class (e.g., frequency and duration of physical activity).

Age Disparities in PE

Younger schoolchildren are more likely to have a classroom teacher for PE (67% in mainly elementary grades), while older schoolchildren tend to have a PE specialist (98% in mainly secondary grades) (2011 Opportunities for Physical Activity at School Survey, CFLRI).

Figure 18. Average Minutes Canadian Students Spend in PE Per Week and the Percentage of Canadian Students Taking PE (2011 Opportunities for Physical Activity at School Survey, CFLRI).



Implementation of PE

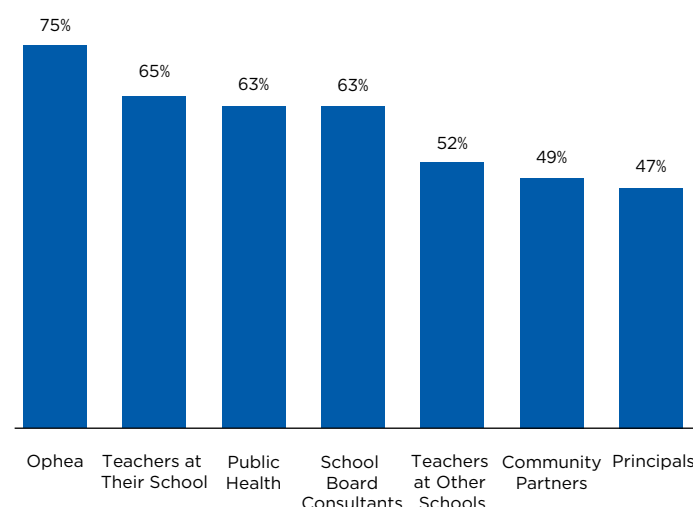
As stated in previous Report Cards, there is an ongoing need for evaluation of PE implementation in schools across Canada. A recent study in Ontario received data on Health and PE (H&PE) implementation from 22 school board contacts, 92 elementary school principals and 159 elementary school teachers, who represent 17 English school boards, 5 French school boards and 75% of geographic regions in Ontario. Only 7% of instructional time in the school day was devoted to PE in English schools, and 8% in French schools. Figure 19 depicts the most important sources of support for H&PE among teachers. Unfortunately, the majority of teachers (> 70%) do not contact these supports. Another teacher within the school was the most likely resource to be accessed. This may suggest that identifying these “key teachers” for additional training could advance the system.

Ontario school boards report only 1 H&PE consultant/instructional leader responsible for H&PE at the school board level. 64% of consultants/instructional leaders responsible for H&PE typically hold this responsibility within other responsibilities. 53% of English school board contacts have both a PE-related degree and specialist qualifications. 41% of French

school board contacts indicate that they have a PE-related degree. The fact that in approximately half the cases, school board contacts responsible for PE curriculum do not have a PE-related degree is concerning.

21% of elementary school teachers have a PE-related degree and up to 34% of respondents have a PE degree and/or specialist or additional qualifications. 40% of English teachers and 21% of French teachers report having no training related to PE.¹⁰¹

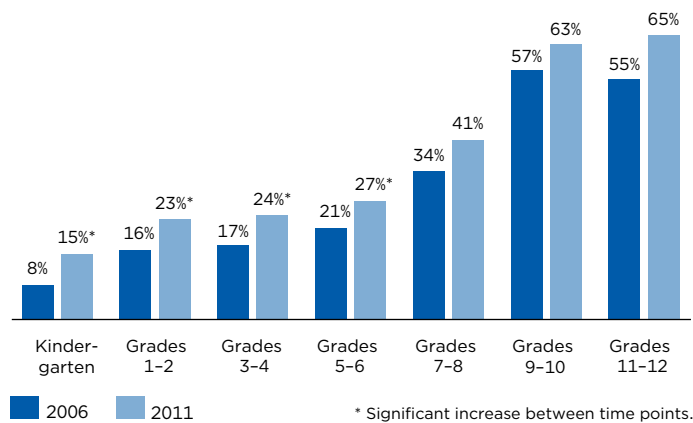
Figure 19. Sources of Support for Health and Physical Education Implementation Among Elementary School Teachers in Ontario, 2011 (Source: Manske and Nowaczek, 2011¹⁰⁰).



Grade-Related Disparities in PE

Recent data from CFLRI’s 2011 Opportunities for Physical Activity at School Survey reveal that the percentage of schools reporting at least 150 minutes of PE per week generally increases with grade level. Students in senior grades receive more PE than students in junior grades (Figure 20). However, this trend may be potentially misleading. As Figure 18 shows, the percentage of students participating in PE goes down sharply by grade even though the total amount of time spent in PE goes up. This may be because PE is optional for high school students and generally lasts for only one semester of the academic year among those who choose PE. Therefore, while high school students may spend more minutes in PE per week than other students, this may not amount to a greater volume of time spent in PE over the course of a year. This is further compounded by semestering, whereby students receive a heavy dose in one term, but may not take the course in a second term.

Figure 20. Percentage of Schools in Canada Reporting at Least 150 Minutes of PE Per Week (Source: 2011 Opportunities for Physical Activity at School Survey, CFLRI).



Evaluation of the Daily Physical Activity (DPA) Policy in Ontario

In 2005, the Ontario Ministry of Education announced a policy requiring all elementary schools to provide students with opportunities to participate in at least 20 minutes of sustained MVPA each school day during instructional time. A study in Ontario, Project BEAT (physical.utoronto.ca/Beat.aspx), explored 16 Toronto District School Board schools to determine the percentage of children participating in DPA who achieved sustained MVPA within these sessions (the policy objectives). The physical activity of 1,027 schoolchildren in Grades 5-6 was measured using accelerometers, and classroom schedules were collected in order to identify sessions of DPA. The frequency of DPA being offered as well as the number and duration of sustained bouts of MVPA (≥ 5 min) were assessed. Fewer than half of the children were provided with DPA every day. No children sustained MVPA for at least 20 minutes. However, children who engaged in DPA every day were significantly more active than their peers. Additionally, schoolchildren getting at least 1 bout of MVPA per week were more active and likely to meet the Canadian Physical Activity Guidelines, and fewer were overweight. While the majority of schools are not meeting the DPA policy, the policy is effective when properly implemented.¹⁰²

Canadian Assessment of Physical Literacy

Physically literate people “move with competence and confidence in a wide variety of physical activities in multiple environments that benefit the healthy development of the whole person.”¹⁰³ With the decline in childhood fitness levels in Canada¹⁰⁴ and around the world,¹⁰⁵ it has been suggested that children and youth may be deficient in physical literacy, thus signalling the need for a tool that assesses physical literacy. Since physical educators in Canada do not currently have a standardized test to measure the physical literacy of students, researchers from the Healthy Active Living and Obesity Research Group at the Children’s Hospital of Eastern Ontario have developed the Canadian Assessment of Physical Literacy (CAPL). The CAPL is designed to measure 4 domains that are integral to a healthy, active lifestyle: motor skill, physical fitness, physical behaviour and cognitive physical activity knowledge.¹⁰⁶ The successful combination of all these factors, not independent performance in any 1 category, is what identifies a physically literate child or youth.

Over the past 3 years, nearly 2,000 children have participated in the pilot testing of the CAPL to establish the feasibility of the entire battery of tests. To assess motor skill development, an obstacle course was developed and tested for validity and reliability during the summer of 2011. Another feature of the CAPL is the plank abdominal test, which has replaced the partial curl-up test. Children are much more capable of completing the plank, and testing over the past summer proved it both valid and reliable. By the end of the 2011-12 school year, 500 children in Grades 4-6 will be tested along with slightly younger and slightly older children. Once the testing cycle is complete, physical educators will be introduced to the CAPL with the hope that it will be adopted for use in Canadian schools. Researchers across Canada and as far away as Kenya are also interested in using the CAPL for research.

B

Sport & Physical Activity Opportunities at School

THE GRADE FOR THE SPORT & PHYSICAL ACTIVITY OPPORTUNITIES AT SCHOOL INDICATOR IS A B. This reflects the fact that over half of schools in Canada offer a number of intramural and interschool sports, and the majority of parents report that schools offer other physical activity or sport programs outside of regular PE classes.

YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	INC	INC	C	C-	B-	C	B	B

KEY FINDINGS

- > More than half of schools in Canada with Grades 6-10 students offer several intramural and interschool sports (2009-10 HBSC).
- > 77% of parents report their schools offer sport or activity programs outside of regular PE classes (2010 CFLRI).

RECOMMENDATIONS

- > A higher proportion of school budgets should be directed toward athletic fees to minimize income-related disparities in access to sport and physical activity opportunities at school.
- > Schools should provide a variety of physical activity and sporting opportunities that appeal to students with different interests and ability levels, since this has been shown to be successful in motivating student participation and in fostering student leadership.

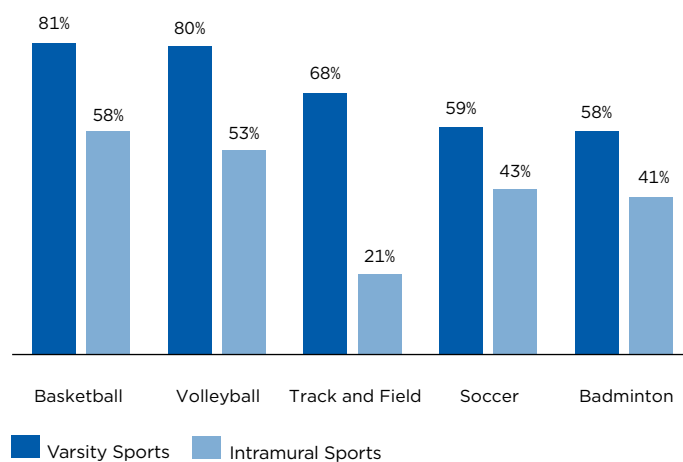
RESEARCH GAPS

- > There is an ongoing need for data on the amount of physical activity students get in varsity and intramural sport offerings at school, as well as data on the proportion of students who actually participate.
- > Data are needed on physical activity opportunities available for preschoolers in the childcare environment.
- > Comparison of participation in varsity and intramural sports by sex, ethnicity and immigrant status is required.

According to school administrators surveyed in the 2009-10 cycle of the HBSC, 53% of schools in Canada with Grades 6-10 students offer 5-9 varsity sports. However, only 36% of these schools offer 5-9 intramural sports, while the majority of schools (61%) offer 0-4 intramural sports. Figure 21 depicts the most frequently offered varsity and intramural sports for Grades 6-10 students in Canada. It is unfortunate that fewer schools offer a broad range of intramural activities, which are more likely to be available to a broader range of students – that is, the goal is participation rather than competition.

Schools are considered ideal settings for physical activity promotion because children and youth spend large amounts of time there, and sport and physical activity opportunities are widely accessible.¹⁰⁷⁻¹⁰⁸ A recent study out of Quebec lends support to the importance of intramural sport offerings at school for physical activity promotion. Schools with 9 or more intramural sport offerings were considered high intramural schools, while schools with 8 or fewer offerings were low intramural schools. The same classification scheme was used to determine high and low extramural sport schools. After accounting for the effects of age, gender, body mass, parental education and school socio-economic status on physical activity, students from high intramural schools still participated in 4 more physical activity sessions per week (defined as activities done for 5 minutes or more at a time) than students from low intramural schools. By contrast, there was no statistical difference in the number of physical activity sessions per week between students from high and low extramural sport schools. These results highlight the potential effectiveness of intramural sport offerings to promote physical activity in adolescent students.¹⁰⁸

Figure 21. The Most Frequently Offered Varsity and Intramural Sports for Grades 6-10 Students in Canada (2009-10 HBSC).



The High Cost of High School

One potential barrier to being physically active at school is athletic fees. In a report released by People for Education on March 24, 2011, it was revealed that many students in Ontario secondary schools pay Student Activity Fees and many also pay fees to play after-school sports. Indeed, 92% of schools have a Student Activity Fee, and the average fee has risen by 75% since 2000-01.¹⁰⁹ These fees have risen steadily over the last 10 years, with athletic fees ranging from \$10 to \$1,800. This maximum fee is 20 times the maximum fee paid in 2000-01.¹¹⁰



B+

School Infrastructure & Equipment

THE GRADE FOR THE SCHOOL INFRASTRUCTURE & EQUIPMENT INDICATOR IS A B+, which reflects an improvement from previous years due to the fact that a large majority of students have regular access to gyms and outdoor facilities at school. The lower percentage of students with access to indoor facilities outside of school hours prevents the grade from being higher.

YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	-	-	-	INC	B	B	B	B+

KEY FINDINGS

- > 95% of school administrators report that students have regular access to a gymnasium during school hours (2009-10 HBSC).
- > A large majority also report that students have access to outdoor facilities (89%) and gyms (84%) outside of school hours (2009-10 HBSC).
- > School administrators report that Grades 6-10 students have regular access to an outdoor field (83%), an outdoor paved area (61%) or a large room indoors (59%) for physical activity (Figure 22). 85% and 70% of school administrators agree/strongly agree that their school's gymnasium and playing field are in good condition, respectively. A majority of school administrators report that students have access to indoor facilities (68%) and equipment (56%) outside of school hours (2009-10 HBSC).

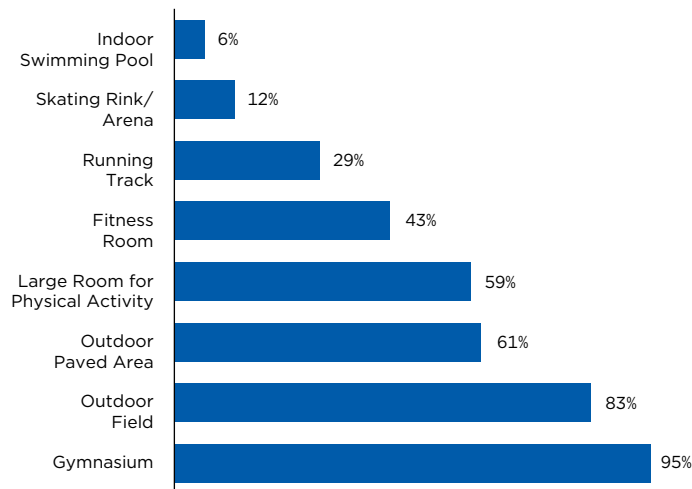
RECOMMENDATIONS

- > The utilization of "natural" play areas (e.g., rocks, stumps, hills) and structures in school grounds should be encouraged.
- > Playground equipment and layouts should be updated and modified periodically to sustain student interest. This may be as simple as redesigning a room for alternate activities.
- > There should be sufficient equipment for PE to optimize movement time in class.

RESEARCH GAPS

- > Data are needed on the proportion of funding for playground infrastructure and equipment that comes from core funding and expenditures, and the proportion that comes from fundraising.


Figure 22. Percentage of Schools That Provide Grades 6–10 Students in Canada With Regular Access to Facilities and Equipment During School Hours, According to Administrators (2009–10 HBSC).



There are a number of opportunities for physical activity promotion at school; these include the classroom, PE classes and non-curricular options such as recess and intra/extramural sports and physical activities.¹¹¹ In all of these, infrastructure and equipment can influence the physical activity levels of students. In a study of 16 primary schools in New Zealand, the number of playground structures was related to physical activity in schoolchildren, even after accounting for age, gender, school size, school policies and weather. For every additional 10 playground structures, schoolchildren accumulated 8% more MVPA at recess and 8% more MVPA over the course of the entire day.¹¹¹ A US longitudinal study showed the adequacy of the school gymnasium to be associated with an initial BMI 0.1 kg·m² lower in kindergartners.¹¹² As noted in the 2011 Report Card,²⁰ studies also continue to show an association between renovations to playgrounds (e.g., shaded areas, increased number of play features) and higher utilization (number of children on the playgrounds).^{113–114} Based on this evidence, maintenance and improvements to school infrastructure and equipment should be given due attention from policy-makers and school administrators at least among elementary grades. A Canadian study of secondary schools in Ontario determined that the only structure associated with activity levels among students was a room adapted for physical activity (e.g., provision of a room for yoga or dance).¹¹⁵

Standing Desks in the Classroom

When school infrastructure and equipment are discussed, the focus is often outside the classroom. However, since students spend the majority of their school day in the classroom, the most successful efforts to promote physical activity and decrease sedentary behaviours at school may occur in the classroom. A recent US study aimed to increase passive calorie expenditure among Grade 1 students in the classroom setting by replacing traditional seated desks with standing desks. Standing desks were installed in 2 classrooms, and the passive energy expenditure of these students was compared to that of Grade 1 students from 2 other classrooms with traditional seated desks. Students in the classrooms with standing desks burned 17% more calories than those in the classrooms with traditional seated desks. When only students above the 85th percentile of body mass for age and gender were compared, students at standing desks burned 32% more calories than those at traditional seated desks. The results from this study show promise for school-based physical activity promotion strategies that target the classroom environment.¹¹⁶ Matching such facilities with plans for effective implementation (a whole school approach) can help insure that scaling up of pilot work is successful.

	School Policy							
	THE GRADE FOR THE SCHOOL POLICY INDICATOR IS A C-. This reflects a decline in this year's grade compared to previous years based on new data, which reveal that approximately half of schools have policies related to physical activity.							
YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	-	-	-	INC	B	B	B	C-

KEY FINDINGS

- > 54% of middle and high schools have a committee that oversees physical activity policies (2009-10 HBSC).
- > 53% report having improvement plans related to physical activity for the current school year (2009-10 HBSC).
 - Figure 23 summarizes how well select statements about physical activity policies characterize schools in Canada with Grades 6-10 students.
- > Based on data from the 2009-10 HBSC, more than 70% of Canadian schools with Grades 6-10 students have passive policies (e.g., skateboards permitted on school grounds) and facilities (e.g., bicycle racks in secure areas to avoid theft) to encourage bicycle and small-wheeled vehicle use. Fewer than 40% of schools have active programs designed to encourage active transportation (e.g., organized Walk to School days).⁸⁷

RECOMMENDATIONS

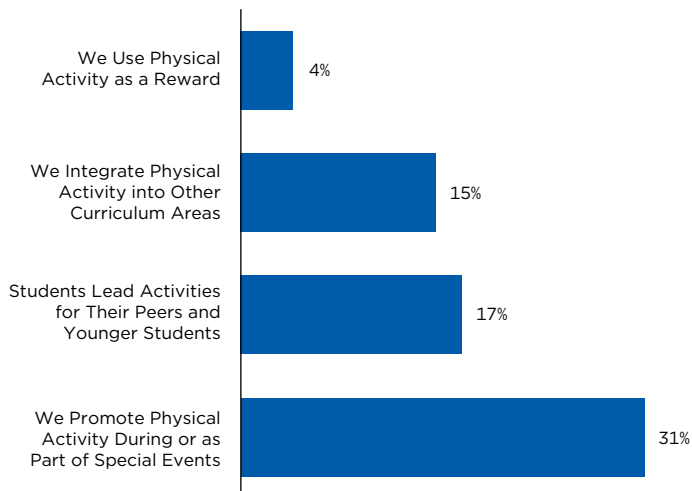
- > Stronger accountability measures are required to ensure the documented curriculum is taught.

RESEARCH GAPS

- > More rigorous research is needed for the evaluation of school-based policies (i.e., DPA/Manitoba High School PE policy).

The presence of physical activity policies at school may have a significant impact on the physical activity levels of students. A recent study focusing on school policies in 30 elementary schools in Ontario found that Grades 5-8 students attending a school in the action phase for availability and use of interschool physical activity programs (i.e., meeting the recommendations related to school capacity for physical activity in several areas, but with room for improvement) were less likely to be overweight than students in a school that was only in the initiation phase (i.e., extensive room for improvement in meeting the recommendations related to school capacity for physical activity).⁴⁷

Figure 23. The Percentage of School Administrators Who Agree That These Statements Characterize Their Schools “A Lot” (Source: 2009-10 HBSC).



School Bans Balls Over Playground Safety Concerns

A Toronto elementary school has banned most balls from its playground, citing the need to protect staff and students after a parent got hit in the head with a soccer ball. The new policy has infuriated parents and students, and exposes what child-health researchers say is a growing focus on child safety that is keeping kids from being physically active.¹¹⁷ For more information on how safety concerns are a major barrier to active play in children and youth, see page 24.



HOCKEY EQUIPMENT
Child's Activity

FAMILY AND PEERS



SKIPPING ROPE

Child's Toy

D+	Family Physical Activity							
	<p>THE GRADE FOR THE FAMILY PHYSICAL ACTIVITY INDICATOR REMAINS A D+ FOR THE 2ND YEAR IN A ROW, which reflects the fact that although well over half of Canadian parents are providing financial and logistical support for their kids' physical activity opportunities (2010 PAM, CFLRI), very few parents appear to be physically active with their children and youth.</p>							
YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	C-D	D-D	D	B-D	C+	D	D+	D+

KEY FINDINGS

- > Only 15% of Canadian adults are active enough to meet the guideline of 150 minutes of physical activity per week.¹¹⁸
- > 38% of parents say they often played active games with their children in the past year (2010 PAM, CFLRI).
- > Children with parents who consider themselves substantially less active than their peers take fewer daily steps on average than those children with parents who consider themselves more active than their peers (Figure 24) (2010-11 CANPLAY, CFLRI).

RECOMMENDATIONS

- > Communications campaigns promoting outdoor time should be implemented.
- > Parents should encourage their children to engage in more unstructured, outdoor time.
- > Recreation programmers should be encouraged to plan for more family-based activities. Creativity among recreational programmers in designing programs that accommodate various family needs (e.g., fitness class for parents at the same time as one for kids) should be encouraged.

RESEARCH GAPS

- > Though increases in parental physical activity may be associated with the physical activity of their children, how families engage in these physical activities (e.g., together or separately) requires more research.

Though not nationally representative, Keeping Pace reveals the frequency with which parents in Nova Scotia are involved in their children's physical activity in one capacity or another (Tables 5-6). Although 67% of parents report that they encourage their child most days of the week to be physically active, only 14% actually engage in physical activity with their child most days of the week (Table 5). 66% almost never participate in physical activity while their child is attending (Table 6).

More nationally representative data on family physical activity with this level of detail are required to further understand how parents influence their children's physical activity and vice versa. We also need to ensure that parental efforts are making an overall contribution to children/youths' physical activity. For example, while Table 6 points out that more than half of parents support their children's physical activity at least weekly (contribute to activity), the parents do so by driving them (an activity opportunity lost).

Figure 24. Average Daily Steps of Children and Youth by Parent's Activity Level, Compared to Peers (2010-11 CANPLAY, CFLRI).

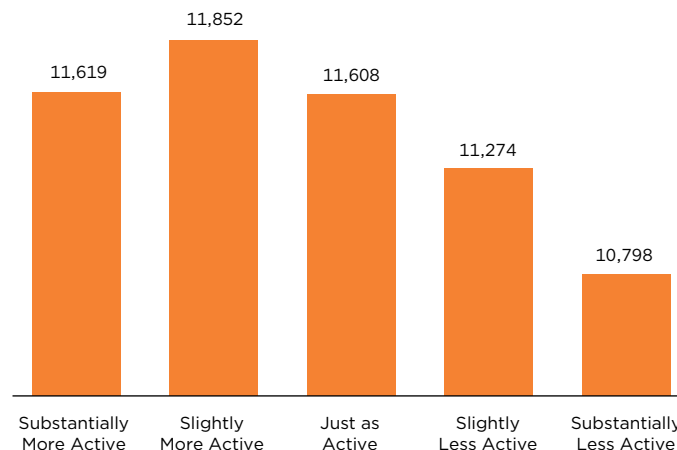


Table 5. To What Extent Do You... (Source: 2009-10 Keeping Pace)

	ALMOST NEVER	ONCE OR TWICE PER MONTH	ONCE OR TWICE PER WEEK	MOST DAYS	NO RESPONSE
Engage In Physical Activity With Your Child	17%	29%	33%	14%	8%
Encourage Your Child to be Physically Active	3%	5%	18%	67%	7%
Enrol Your Child In Physical Activities Outside of School, Including Sport and Recreation Programs	19%	9%	34%	29%	9%
Talk About The Benefits of Physical Activities With Your Child	10%	23%	22%	38%	8%
Talk About Opportunities for Physical Activity With Your Child	13%	26%	23%	29%	8%
Enjoy Physical Activities	8%	14%	26%	45%	8%

Table 6. How Often Do You... (Source: 2009-10 Keeping Pace)

	ALMOST NEVER	ONCE OR TWICE PER MONTH	ONCE OR TWICE PER WEEK	MOST DAYS	NO RESPONSE
Drive Your Child to Physical Activities	17%	11%	37%	27%	8%
Attend Your Child's Physical Activities as A Coach	78%	4%	5%	4%	10%
Attend Your Child's Physical Activities as A Spectator	19%	14%	27%	31%	9%
Attend Your Child's Physical Activities as A Volunteer	54%	18%	8%	10%	10%
Participate In Physical Activities While Attending Your Child's Physical Activities	66%	12%	9%	4%	9%
Participate In Physical Activities Yourself at Other Times	19%	17%	26%	31%	8%

Role Modelling

Parents can be a major influence on their children's physical activity and have a profound impact on the way children spend their time. Parents contribute to the "social learning" of their children by role modelling, actively encouraging their children to participate in physical activities and bringing children to events where they are free to be active.¹¹⁹

Though research on the relationship between parent-child physical activity patterns is mixed, a recent study shows a strong link between parent-child physical activity: the more active the parents are, the more active their children are likely to be. This is especially true when both parents are physically active.¹¹⁹ This provides evidence for the influence of parental role modelling on children's, and even preschoolers',¹²⁰ physical activity.

It is currently unclear as to whether the amount of time parents spend in sedentary pursuits is also linked to sedentary time in their children. A recent study, however, found a weaker association between parent-child sedentary behaviour than parent-child physical activity.¹¹⁹ This may be explained in part by the likely influence of other, non-parental factors on children's sedentary pursuits, including the influence of peers (see the Peer Influence indicator on page 50).

Encouraging Physical Activity

Encouraging physical activity in the home environment is one way that parents can help their children engage in healthy active lifestyles. Most parents agree that exercising and sports are very important for child health;¹²¹ however, other parental factors, such as actively encouraging physical activity and creating a physical activity-friendly home environment, are also important to consider.

In a recent study, many childcare providers highlighted the lack of encouragement of an active lifestyle from several parents outside of childcare hours. They further cited this as a barrier to physical activity.¹²⁰ Childcare providers acknowledge their reliance on parents/guardians to create a home environment that complements the positive physical activity messaging that children receive in childcare. Childcare provider-parent partnerships may help parents encourage their children to engage in physical activity outside of childcare settings.

Fostering an Environment That Supports Physical Activity

Parents play an essential role in providing opportunities for preschoolers to be physically active on a daily basis.¹²⁰ Unfortunately, some parents may not be equipped with the appropriate resources to provide their children with an environment that promotes physical activity.

The Active Families program (New York) uses a community resources guide that links families to local resources for physical activity, such as outdoor recreation venues. The goal of the program is to address community-based barriers to outdoor physical activity and to simultaneously reduce screen time while increasing outdoor play. In a US study where parents participated in the Active Families program, they reported that their children were less likely to watch more than 2 hours of television per day and were more likely to play outdoors for 60 minutes per day than before entering the Active Families program.¹²² Parents also reported that they were less likely to watch more than 2 hours of television per day and were more confident in their ability to limit their child's television. This indicates that community interventions targeting the physical activity and screen time behaviours of families may help enable both parents and children to reduce screen time and be more physically active.



SOCCER BALL
Child's Toy

INC	Peer Influence							
	THE GRADE FOR THE PEER INFLUENCE INDICATOR IS INC (INCOMPLETE) FOR THE 4TH YEAR IN A ROW since not enough data are available to inform this grade.							
YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	-	-	-	-	INC	INC	INC	INC

KEY FINDINGS

- > 55% of middle and high school students sometimes lead physical activities at school for their peers and younger students (Figure 25) (2009-10 HBSC).

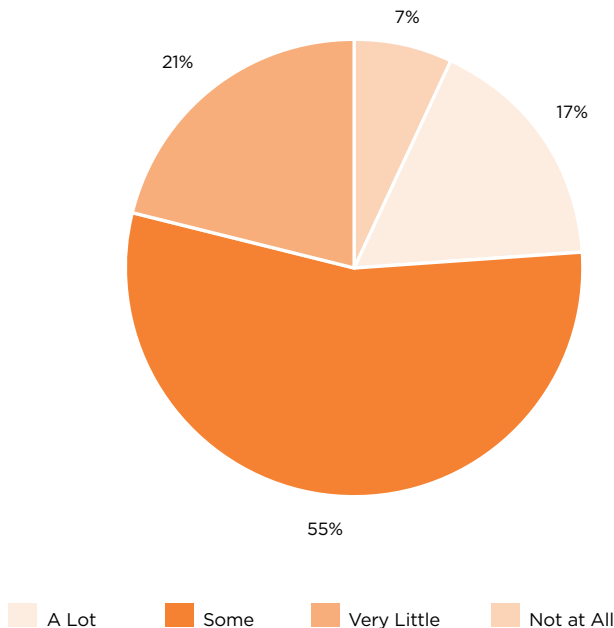
RECOMMENDATIONS

- > Peer-leader programs for physical activity promotion should be implemented in schools, and recreation departments should explore the use of peer-led recreation programming and park supervision.
- > Create more opportunities for older students to work together to facilitate/direct games of low organization for younger children after school – not only as part of leadership class.
- > Encourage recreational programmers to create offerings that focus on bringing a friend or working out with a friend.

RESEARCH GAPS

- > Further research needs to explore how peer influence on physical activity is affected by gender.
- > Most peer influence research has been done in school-based settings. Research is needed in other contexts (e.g., neighbourhoods, after-school programs, sport programs, summer camps).

Figure 25. How Often Students Led Physical Activities at School for Their Peers and Younger Students, According to School Administrators (Source: 2009–10 HBSC).



The role of peer influence on the physical activity of children and youth is not entirely understood; however, there is a growing body of evidence suggesting that peer influence plays a role.¹²³ The social and friendship networks of children and youth have been shown to influence many behaviours including smoking, and interventions targeting these influences have been relatively successful.¹²⁴ Similar programs involving peers may be useful in promoting physical activity.

The Influence of Best Friends and Peer Networks on Physical Activity

Best friends influence many aspects of each other's lives including physical activity. According to a recent study out of Britain, when children take part in physical activity at home with their best friend or in the neighbourhood where they live, they tend to engage in higher levels of physical activity.¹²⁴ Though girls appear to be more active when they participate in physical activity with their best friend, boys with an active best friend appear to spend more time doing intense physical activity on their own.¹²⁴

In addition to research that looks at the influence of best friends on physical activity, some evidence suggests children tend to cluster in friendship groups with similar physical activity levels. In a study of 559 British children, those self-identifying as "close friends" had more similar physical activity patterns than those self-identifying as "distant friends."¹²³ Regardless of which comes first – the friendship groups or the physical activity patterns – there appears to be an association between peer influence in friendship groups and physical activity.

Disparities

The effect of peer influence on physical activity may differ in children with a high BMI (> 85th percentile) compared to children of normal BMI (< 85th percentile). One study examining the amount of time spent in physical activity alone vs. with a friend of either similar or different BMI found the following: children with a high BMI who were physically active alone engaged in less physical activity than their normal-BMI counterparts; however, this disparity disappeared in the presence of a friend of either similar or different BMI.¹²⁶ Further, the quantity of physical activity may differ depending on age and gender. Among girls entering secondary school, each additional friend is associated with 3.7 minutes more of MVPA after school and 9.8 minutes more of MVPA on the weekend.¹²⁷ Girls' MVPA also increases if they have more friends or more friend support for physical activity after the move to secondary school. These peer influences are not seen in boys.



PING PONG
Child's Activity

COMMUNITY AND THE BUILT ENVIRONMENT



BASEBALL GLOVE

Child's Activity

A-

Proximity & Availability of Facilities, Programs, Parks & Playgrounds

THE GRADE FOR THE PROXIMITY & AVAILABILITY OF FACILITIES, PROGRAMS, PARKS & PLAYGROUNDS INDICATOR REMAINS AN A- because there were no changes in the data from last year, when it was reported that the large majority of Canadian children and youth live in communities where the built environment has characteristics that are conducive to physical activity and opportunities for physical activity are nearby and available (2010 PAM, CFLRI).

YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	C	C	C*	B+	B	B	A-	A-

* The 2007 grade reflected both availability and usage. In all other years, availability was graded on its own.

KEY FINDINGS

- > 93% of parents report local availability of public facilities and programs for physical activity (2010 PAM, CFLRI).
- > Parents from highest income households report more access to facilities than lowest-income households (2010 PAM, CFLRI).
- > Compared to 2000, there has been an increase in the proportion of municipalities saying that they have designated bicycle lanes on roads, multi-use trails (both permitting and prohibiting vehicular traffic), and bicycle carriers and ski racks on public transport (if public transit exists) (Figure 26) (Survey of Physical Activity in Canadian Communities, 2009, CFLRI).
- > A substantial proportion of schools in Canada (27%) do not know if there is any agreement in place with municipalities for shared use of facilities for physical activity. Among schools that are aware, 86% have an agreement with municipalities (2011 Opportunities for Physical Activity at School Survey, CFLRI).
- > Many Canadian schools report the availability of a municipal sports and recreation facility on evenings and

weekends (56%). See Figure 27 for the availability of other community facilities for physical activity and sport on evenings and weekends (2011 Opportunities for Physical Activity at School Survey, CFLRI).

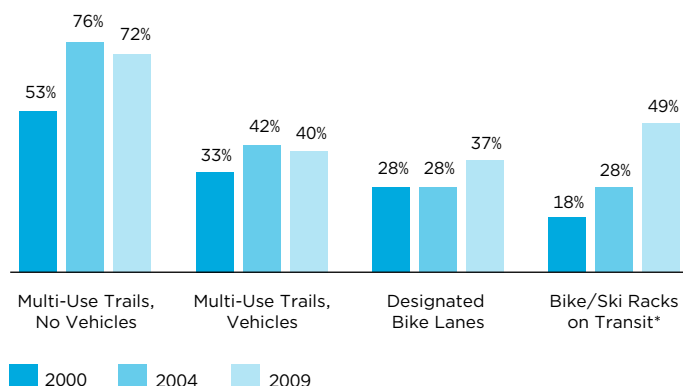
RECOMMENDATIONS

- > Encourage collaboration between school board administrators and recreational directors regarding shared use of facilities (this relationship should go both ways).
- > Ensure adequate sidewalks, trails and bike lanes to encourage use of existing programs, parks and playgrounds.

RESEARCH GAPS

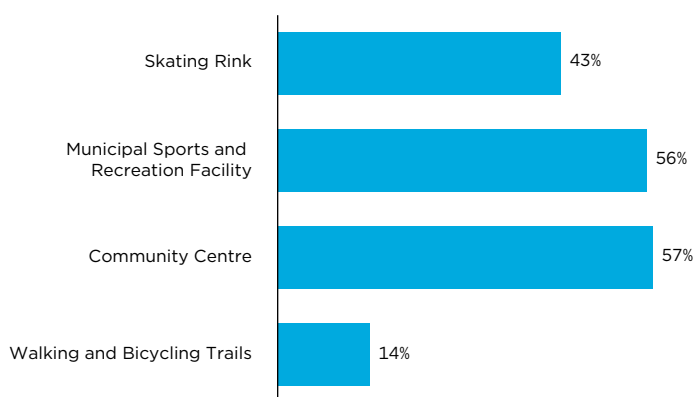
- > Research is needed on the actual vs. perceived availability of facilities, programs, parks and playgrounds.
- > There is a need to explore why families are not accessing local spaces and programs despite identifying the spaces and programs as available.

Figure 26. Physical Infrastructure and Services Supporting Physical Activity, 2000-09 (Source: Survey of Physical Activity in Canadian Communities, 2009, CFLRI).



*Percentages based on those who use public transit, not the entire population.

Figure 27. Percentage of Canadian Schools Reporting Access to Community Facilities on Evenings and Weekends (Source: 2011 Opportunities for Physical Activity at School, CFLRI).



Data from the 2010 PAM (CFLRI) revealed that a large majority of Canadian parents (93%) reported local availability of public facilities and programs for physical activity.²⁰ Though this remains the most current data on the availability of public facilities and programs, recently released data from the 2010 PAM provide insight into the proximity and availability of non-designated physical activity facilities such as schoolyards and community centres. Specifically, 78% of parents with 5- to 17-year-olds report the local availability of these facilities in the community (2010 PAM, CFLRI). Furthermore, 61% of parents with 5- to 17-year-olds report the availability of commercial facilities (e.g., YM/YWCA) for physical activity and sport (2010 PAM, CFLRI, <http://www.cflri.ca/node/959>).

Disparities

Though no age- or gender-related disparities are apparent, some regional differences exist in Canada around the availability of non-designated physical activity facilities and commercial facilities (e.g., schoolyards, community centres). As reported by CFLRI, 'Compared to the national average, a lower proportion (70%) of parents living in Quebec indicate that these types of non-designated facilities are available in their community for children to be active. In contrast, relatively more parents living in western Canada (87%) indicate that these types of places are available' for their children (2010 PAM, CFLRI). Parents living in the North are less likely than parents nationally to report that there are commercial facilities available for physical activity and sport (2010 PAM, CFLRI, <http://www.cflri.ca/node/959>).

Socio-economic disparities are also present. As reported by CFLRI, 'A greater proportion of parents from high-income households ($\geq \$100,000$ per year) report having other places that may not be specifically designated for physical activity available in their community compared to those from the lowest-income households ($< \$50,000$ per year) (70%). Similarly, a greater proportion of parents with a university education (81%) indicate availability of these types of places in the community compared to those with a high school education (73%). In general, parents from smaller communities are less likely than those from larger communities to report the availability of these types of places' (2010 PAM, CFLRI, <http://www.cflri.ca/node/959>). Also reported by CFLRI, 'Parents from the highest-income households ($\geq \$100,000$ per year) are most likely to indicate that commercial facilities for physical activity and sport are available for their children in the community. A similar relationship also appears with parents' education level; parents with a university education are the most likely to say that these types of facilities exist. Generally speaking, there is an increase in the percentage of parents indicating the availability of local commercial facilities for physical activity and sport with increasing community size (from 33% of parents indicating availability of these types of facilities when living in communities with less than 1,000 residents, to 75% of parents living in communities with 250,000 or more residents)' (2010 PAM, CFLRI, <http://www.cflri.ca/node/959>).

B+

Community Programming

THE GRADE FOR THE COMMUNITY PROGRAMMING INDICATOR IS A B+ FOR THE 4TH YEAR IN A ROW, reflecting the lack of change in the best available data.

YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	-	-	-	-	B+	B+	B+	B+

KEY FINDINGS

- > Availability remains high, yet only 51% of municipalities offer programs for youth at risk, 49% offer discounted child fees and 24% target Aboriginal people (2009 Survey of Physical Activity in Canadian Communities, CFLRI).
- > 91% of municipalities report offering physical activity programs or scheduling specifically for children (2009 Survey of Physical Activity in Canadian Communities, CFLRI).

RECOMMENDATIONS

- > Encourage the development of more non-traditional offerings that reach out to diverse populations and in particular to those not currently engaged in sufficient physical activity.

RESEARCH GAPS

- > There is a need to improve facilitators' understanding of access and use of community programs.

CAASP Profile

The Canadian Active After School Partnership (CAASP) is a group of 10 national organizations that are working together to support the delivery of quality, active, after-school programs. The ultimate goal of the initiative is to support increased physical activity levels and healthy eating practices among Canada's children and youth. Together CAASP aims to:

- Explore and establish strategies to address barriers to participation.
- Build leadership capacity for quality program delivery.
- Promote community mobilization through policy awareness and implementation, increased program opportunities, and broadened access.
- Develop (or enhance access to) resources and support tools.
- Raise awareness and build on Best Practices for program support delivery and barrier interventions.
- Engage an extensive network of partners and collaborators (both traditional and non-traditional).

CAASP has now completed the first phase of this initiative. During this phase a number of activities have taken place. This includes making linkages to after-school initiatives in most provinces, hosting focus groups among audiences that serve “at risk” children, the development of a policy framework, and a vision/plan of action through to 2015.

In addition, CAASP has developed a website. The Active After School Hub (www.activeafterschool.ca) is a common and central place where resources from all partners and other relevant organizations can be housed. It includes a searchable database, news and updates and will eventually enable program leaders to dialogue with each other, no matter where they are in Canada.

CAASP Partners

Active Healthy Kids Canada
Active Living Alliance for Canadians with a Disability (ALACD)
Boys and Girls Clubs of Canada (BGCC)
Canadian Association for the Advancement of Women in Sport and Physical Activity (CAAWS)
Canadian Fitness and Lifestyle Research Institute (CFLRI)
Canadian Parks and Recreation Association (CPRA)
Green Communities Canada
National Association of Friendship Centres
Physical and Health Education Canada (PHE Canada)
YMCA

Disparities

The number of aquatics programs offered in the Northwest Territories is limited and has decreased over the past 10 years.¹²⁸



KITE
Child's Toy

C

Usage of Facilities, Programs, Parks & Playgrounds

THE GRADE FOR THE USAGE OF FACILITIES, PROGRAMS, PARKS & PLAYGROUNDS INDICATOR IS A C. This reflects the fact that there is a lack of new data to inform the grade.

YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	-	-	C*	D+	D	D	C	C

* The 2007 grade reflects both availability and use. In all other years, usage was graded on its own.

KEY FINDINGS

- > 61% of parents with kids aged 5-17 say they use public facilities and programs for physical activity at least sometimes (2010 PAM, CFLRI).
- > An estimated 67% of current facilities need to be repaired or replaced (Sport Matters Group, 2011).
- > Only 25% of parents with 5- to 17-year-olds report that their children use non-designated physical activity facilities (e.g., schoolyards, community centres) either often or very often, which represents no significant change since 2000 (Figures 28-29) (2010 PAM).
- > 18% of parents with 5- to 17-year-olds report that their children use commercial facilities (e.g., YM/YWCA) for physical activity or sport either often or very often (Figures 28-29) (2010 PAM, CFLRI).
- > Based on annual report data, 1.275 million children, teens and young adults use YM/YWCA facilities. Approximately 200,000 children and youth, ranging in age from preschool to young adulthood, use Boys and Girls Club facilities across Canada.¹²⁹

RECOMMENDATIONS

- > Create more effective means of making children, adolescents and their parents aware of what facilities, programs, parks and playgrounds exist in their neighbourhood, including hours of service and/or supervision.
- > Subsidize physical activity programs for low-income households.
- > Provide time in facility schedules for drop-in, spontaneous activities. Many arenas and gyms are booked for organized activities that don't serve all children and youth.

RESEARCH GAPS

- > There is a need for better surveillance data on usage rates of facilities and programs as well as on the characteristics of users.

Figure 28. Child's Use and Suitability of Non-Designated Physical Activity Facilities (Source: 2010 PAM, CFLRI).

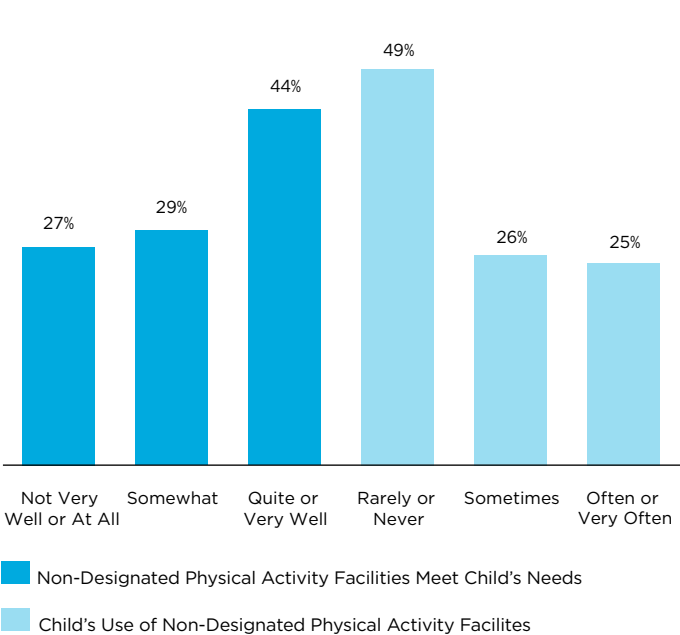
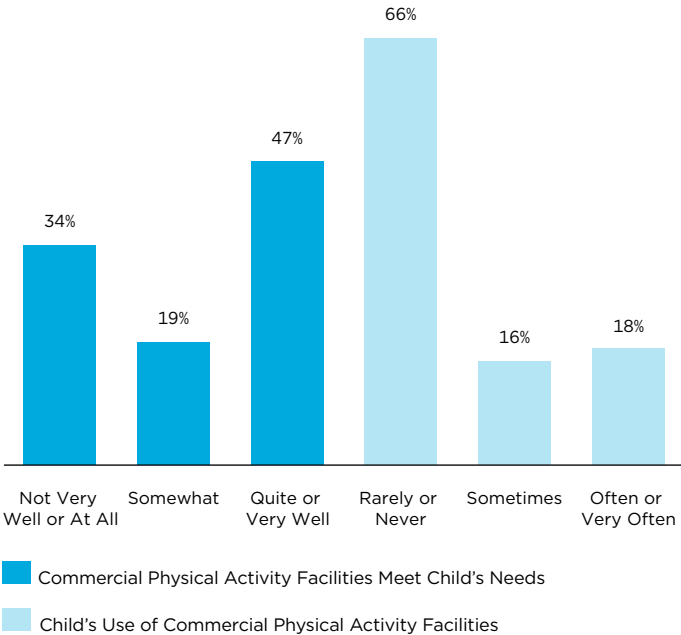


Figure 29. Child's Use and Suitability of Commercial Physical Activity Facilities (Source: 2010 PAM, CFLRI).



TOBOGGAN
Child's Activity

B

Perceptions of Safety & Maintenance

THE GRADE FOR THE PERCEPTIONS OF SAFETY & MAINTENANCE INDICATOR IS A B. This reflects the fact that well over half of Canadian families believe their neighbourhood is safe for children to walk to and from school.

YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	-	B	-	-	B	B	B	B

KEY FINDINGS

- > 64% of families agree their neighbourhood is safe for kids to walk to and from school (Figure 30).⁶⁸
- > In one study, the highest perceived threat to children's safety was traffic, with 47% of parents agreeing it is an issue.⁴⁶

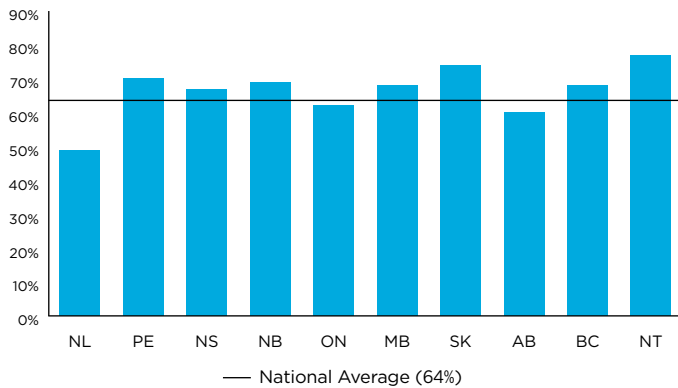
RECOMMENDATIONS

- > Social marketing strategies should be implemented to initiate conversations about how neighbourhoods may be safer than people think they are.
- > Find better ways to make parents aware that the community is a safe place for their children to live and play – without parents' direct, continuous supervision.
- > Encourage parents to manage safety concerns (e.g., neighbourhood watch program, walking school bus, shared supervision).

RESEARCH GAPS

- > The influence of the media on actual vs. perceived safety concerns is under debate and requires further research.

Figure 30. The Percentage of Families that Agree or Strongly Agree Their Neighbourhood is Safe for Their Children to Walk to and from School, by Province/Territory (Source: Faulkner et al., 2011⁶⁸). Note: Data are not available for Quebec, Nunavut and the Yukon.



Data from Keeping Pace (Nova Scotia) reveal that parents of Grades 3, 7 and 11 students like the neighbourhood where they live (89%), believe it is safe for children to play outdoors during the day (90%) and believe that crime is not an issue in their neighbourhood (72%) (2009-10, Keeping Pace). Agreement is not unanimous, however, on the question of whether traffic is an issue in their neighbourhood: 46% disagree or strongly disagree, while 47% agree or strongly agree. This suggests that while neighbourhoods are generally perceived to be safe, traffic issues may need to be addressed.

There is evidence supporting the relationship between the built environment and health behaviours such as physical activity.¹³⁰ The perception of neighbourhood or community safety may affect community members' willingness to engage in physical activities. This perceived level of safety may or may not differ from the actual level of safety within the community.

Does Neighborhood Safety Influence Children's Active Transportation to School?

The results from studies on whether neighbourhood safety (related to traffic, environmental hazards, crime and incivilities) affects physical activity have been largely mixed.¹³¹ One US study found that schools with a higher proportion of students who felt unsafe going to or from school had lower overall levels of physical activity.¹³² However, the results of another study reveal that children who live on a street block that is above the median level of incivility (e.g., crime rate, physical or social disorder and indicators of drug or alcohol abuse) were 3.5 times more likely to walk to school despite the fact that these same children were 61% less likely to perceive their neighborhood as safe.¹³³ In some

circumstances, walking to school may be a necessity if the household does not have a car. Though the findings on this topic remain mixed, the results of such studies suggest there may be other factors to consider when assessing the effect that perception of safety has on active transportation to school, such as socio-cultural influences or parental perceptions of safety.¹³³

Within-Community Influences of Perception of Safety

Perceptions of safety may vary even among different groups of people residing in the same community. An Ottawa community-based study found that road safety was cited as one of the major barriers to community cycling among cyclists but not among non-cyclists.¹³³ In fact, road safety was among the lowest of the common perceived barriers to cycling among non-cyclists. While the community and the actual level of safety remained identical in these two groups, their perceptions of safety varied. However, a Dutch study found that social influence does not affect the overall perception of safety.¹³⁴ The results of studies that have examined the effect of social or cultural influences on the perception of safety remain mixed; however, the notion that socio-cultural influences may affect the perception of safety within sub-groups of the same community may provide much needed insight in this area.¹³⁵

The Effect of the Household on Perception of Safety

As stated previously, parents' perception of neighbourhood safety may have an effect on their children's perception of safety.¹³⁵ For example, parents who use their car often have higher risk perceptions, while other mobility variables (e.g., parents' frequency of walking, children's travel mode to school) do not seem to be linked to perceptions of risk for pedestrians near schools.¹³⁵ Further, parents who are aware of an accident in their neighbourhood or at their child's school show significantly higher risk perceptions. This is also true for parents who consider traffic as the leading source of danger for their children and who have a low sense of control over road risks.¹³⁵

The perception of safety can vary within the same household: fathers tend to place high value on providing their children with risk-taking opportunities¹³⁶ while mothers may have higher risk-perceptions in general.¹³⁵

D

Municipal Policies & Regulations

THE GRADE FOR THE MUNICIPAL POLICIES & REGULATIONS INDICATOR IS A D due to temporal trend data suggesting a slight increase in the percentage of municipalities reporting physical activity policies.

YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	-	-	-	D	D	D	D-	D

KEY FINDINGS

- > 45% of municipalities rate opportunities for sport as a high priority for promotion; 39% rate physical activity opportunities as high priority (Figure 31) (2009 Survey of Physical Activity in Canadian Communities, CFLRI).
- > 72% of Canadian municipalities report having multi-use trails that prohibit motorized traffic; 40% have multi-use trails that permit motorized traffic; 49% provide traffic-calming solutions or sidewalks on highly used pedestrian routes; 37% have designated bicycle lanes on roads (Figure 32) (2009 Survey of Physical Activity in Canadian Communities, CFLRI).
- > Compared to 2000, there has been an increase in the proportion of municipalities reporting designated bicycle lanes on roads, multi-use trails (both permitting and prohibiting vehicular traffic), and bicycle carriers and ski racks on public transport (if public transit exists) (Figure 32) (2009 Survey of Physical Activity in Canadian Communities, CFLRI).
- > There are 145 registered In Motion communities in Saskatchewan, and 165 in Manitoba. Nova Scotia has 40 municipalities with completed (or in progress) comprehensive physical activity strategies.

RECOMMENDATIONS

- > Social marketing strategies should be implemented to initiate conversations about how neighbourhoods are likely safer than people think they are.
- > Find better ways to make parents aware that the community may be a safe place for their children to live and play – without parents' direct, continuous supervision.
- > Encourage parents to manage safety concerns (e.g., neighbourhood watch program, walking school bus, shared supervision).

RESEARCH GAPS

- > Municipalities should make a concerted effort to ensure policies aimed at increasing safety are not acting as a major barrier to participation in physical activity.
- > Further research is needed to clarify actual versus perceived infrastructure within municipalities.

Figure 31. High Priorities for Promotion of Healthy Living Among Canadian Municipalities (Source: 2009 Survey of Physical Activity in Canadian Communities, CFLRI).

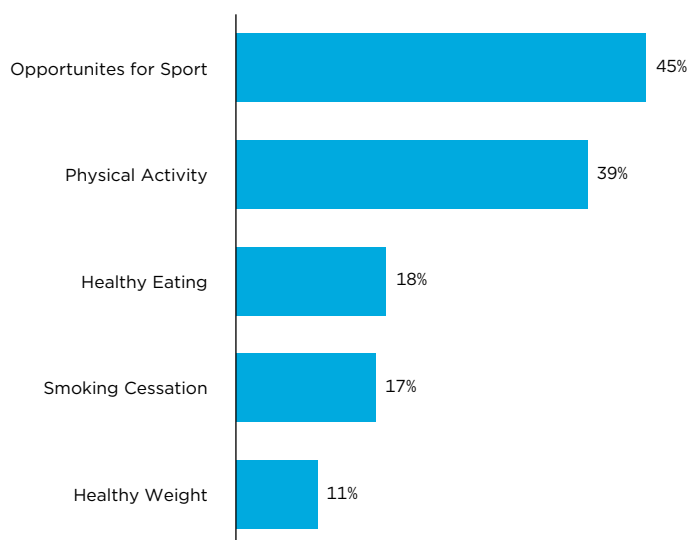
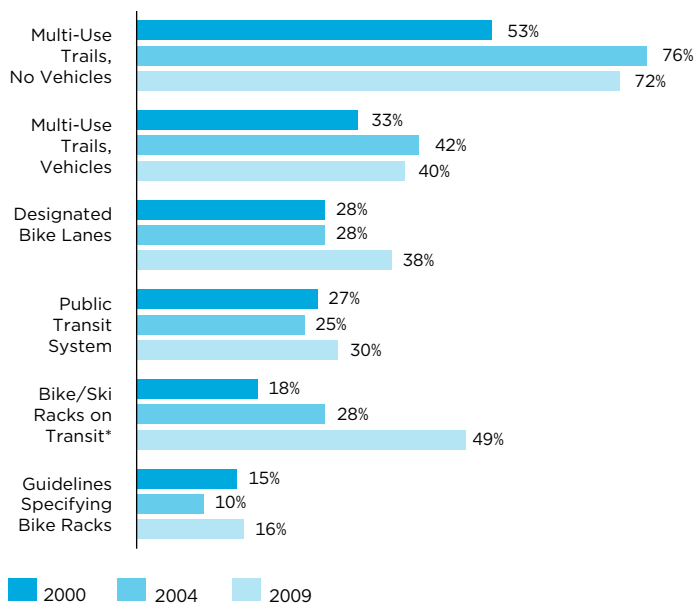


Figure 32. Physical Infrastructure and Services Supporting Physical Activity as Reported by Canadian Municipalities (Source: 2009 Survey of Physical Activity in Canadian Communities, CFLRI).



*Percentages based on those who use public transit, not the entire population.

The Search for the Live Right Now Capital of Canada

CBC launched Live Right Now on January 1, 2011, to inspire Canadians to join together and change the health of this country. The initiative is built around the idea that small changes to the way people move and eat can have a big impact. In 2012, CBC set a goal to find the Live Right Now Capital of Canada, the community that best embodies the Live Right Now spirit.

Because the health of Canadians is directly linked to the time we spend outside and connected to nature, 3 organizations have come together to offer the winning community a reward that will last for generations. The Canadian Wildlife Federation, Bienenstock Natural Playgrounds and Parks Canada have teamed up with CBC to reward the Live Right Now Capital of Canada with a natural playground. Valued at more than \$100,000, the custom-designed and community-built natural playground will reflect the natural heritage of the nearest national park, and Parks Canada will help the winning community experience the national park nearest to them.

This free natural playground will be designed with the winning community to meet their needs. Hewn from the trees, earth and bedrock found across Canada, the natural playground will be a refuge for Canadian wildlife and a haven for children and neighbours to gather and play.

For more information, visit www.liverightnow.com.

INC	Nature & the Outdoors							
	THE GRADE FOR THE NATURE & THE OUTDOORS INDICATOR IS INC (INCOMPLETE) FOR THE 2ND CONSECUTIVE YEAR due to a lack of gradable data.							
YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	-	-	-	-	-	-	INC	INC

KEY FINDINGS

- > There are limited data on the amount and frequency of outdoor activity in children and youth.

RECOMMENDATIONS

- > A national education campaign is required to inform parents, teachers, childcare providers and children about the health benefits of the outdoors, and the potential harms of excessive time indoors.
- > Parents should be encouraged to arrange family trips to provincial and national parks.

RESEARCH GAPS

- > The need for research on the quality/dose of physical activity (amount and frequency) during outdoor/nature activities is ongoing.
- > There is also a need for annual data that measure children and youths' outdoor/nature time, including a baseline measurement.
- > Canadian studies using inter-generational comparisons would be useful (e.g., comparing grandmother to mother to daughter in time spent outdoors) to establish temporal trends.

Table 7. Children's Time Outdoors on Both Weekdays and Weekend Days by Gender
(Source: National Kids Survey, Larson et al., 2011³⁵).

TIME SPENT OUTDOORS EACH DAY

GENDER (BY DAY)	NONE (%)	LESS THAN 1/2 HOUR (%)	ABOUT 1/2 HOUR (%)	ABOUT 1 HOUR (%)	2-3 HOURS (%)	4 OR MORE HOURS (%)
WEEKDAYS						
Boys	2.8	3.2	7.2	19.2	32.1	35.5
Girls	2.3	5.9	9.4	25.4	32.4	24.6
WEEKEND DAYS						
Boys	4.2	0.8	3.4	10.2	24.2	57.2
Girls	4.5	3.3	4.2	13.1	29.9	45.0

National Kids Survey

Though little data exist on the time Canadian children and youth spend in nature and the outdoors, results from the National Kids Survey (NKS) are available on 6- to 19-year-olds in the U.S.¹³⁷ Based on self-report data, most children (63%) generally spend at least 2 hours of time outdoors per day (Table 7). Children and youth spend either more time (40%) or about the same amount of time (45%) outdoors as they did in the previous year. Boys and younger children spend more time outside than other demographic groups.

The most common outdoor activity was playing or just hanging out (84%). Other common activities included biking, jogging or running (80%) and use of electronic media outdoors (65%). Children and youth participated in outdoor nature-based activities less frequently than in other alternatives such as listening to music, art or reading (57%), watching television or DVDs or playing video games (48%) and using electronic media including Internet and texting (48%). Outdoor time on weekdays, weekend days and time spent outdoors relative to the previous year was strongly correlated with the amount of time parents/guardians spent outdoors.

These results suggest that many US children and youth are spending a substantial amount of time outdoors. However, the nature of children's outdoor time may be changing. Playing or hanging out, physical activities and technology-centred activities are more popular than nature-based activities. Electronic media consumption and parental involvement in outdoor recreation activities seem to be important factors influencing children's time outdoors.

The Relationship Between Community Greenness and Outdoor Play

Neighbourhood green space fosters a sense of community for active outdoor play, which may initiate a reconnection with nature in children. In a recent US study, the relationship between community greenness and physical activity was explored in preschool-aged children. Results showed a positive relationship so that as greenness increased, levels of outdoor playtime increased, thus reinforcing the important influence that nature may have on physical activity levels in children.¹³⁸

To Policy Exhibit ➔



POLICY

Public policies have consequences for communities and people. Examples of public policies include government budgets and taxation rules. Public policies provide direction to the central branch of most modern governments – the executive (e.g., Prime Minister’s Office, cabinet and the bureaucracy at the federal governmental level in Canada) – and find expression in government laws and regulations.¹³⁹ In the Policy section of the Report Card, public policies related to physical activity promotion at various levels of government in Canada, and non-government strategies and investments, are graded and discussed.



PUSH CAR

Child's Toy

International Physical Activity Policy Comparison

Physical activity is internationally recognized as one of the most important health-promoting behaviours, and there has been an increasing interest in its ability to reduce the risk of non-communicable diseases (NCDs), such as overweight and obesity.¹⁴⁰ The emphasis on physical activity for health and well-being can be seen through the development of the World Health Organization's (WHO) Global Strategy on Diet, Physical Activity, and Health (DPAH) in 2004 (WHO, 2004) and the Toronto Charter for Physical Activity in 2010.

Policy interventions in public health for the promotion of physical activity, such as those based on the DPAH, have the ability to influence a great number of people.¹⁴⁰ At the national level, politicians, leaders, and decision makers have an opportunity to influence the amount, intensity and variety of physical activity in which children and youth engage. A recent Ipsos Reid poll, commissioned by the Public Health Agency of Canada, found that 60% of respondents thought the federal government is not doing enough to deal with the problem of childhood obesity.¹⁴¹ Further, 90% of those surveyed said the federal government should fund more recreational facilities for youth in their communities and support development that makes it easier for children to incorporate walking and cycling into their daily routines.¹⁴¹ A glimpse into the policies and programs that are in place in other countries may provide a new perspective for reducing rates of childhood obesity through physical activity, and healthy active living for children.

In an effort to assist member states in the development and implementation of a national physical activity plan, and to provide guidance on the available options for the effective promotion of physical activity, the WHO commissioned the 2007 *Guide for Population-Based Approaches to Increasing Levels of Physical Activity*. The guide provides 18 essential elements of successful physical activity promotion policies and plans, and provides a step-wise intervention strategy.

In this Report Card, 9 of the 18 elements provided by the WHO's 2007 Guide for Population-Based Approaches to Increasing Levels of Physical Activity were used to evaluate and compare the physical activity policies of several nations (Table 8). This is not an exhaustive list of the potential factors that may support a country's ability to promote physical activity through policy intervention, nor is this a complete collection and analysis of the vast amount of available literature. This collation of the physical activity policy documents of Canada, and other similar countries, is meant solely to assist researchers, officials and policy-makers in their evaluation of Canada's policies on physical activity promotion.

Canada ranks among the best internationally in the monitoring of physical activity, and houses international leadership in the development of physical activity and sedentary behaviour guidelines. However, **Canada is lacking in the areas of high-level political commitment, integration of physical activity in national policies, and the identification of national goals and objectives.** Funding may be a major barrier to the development of a national, cohesive, physical activity policy. In lieu of national representation for promoting physical activity, the Canadian sport and physical activity sector has mobilized itself to provide guidance and to establish a national framework for physical activity through Active Canada 20/20 (Active Canada 20/20). Canadian policy-makers and decision makers should examine the policies that exist in other countries to promote physical activity, and should consider integrating these policies into existing, related sectors.

Table 8. A Comparison of a Selection of Identified Important Elements of Successful Policies and Plans for Implementing Physical Activity Promotion Policies, from Several Countries.

ELEMENTS	DESCRIPTION	CAN	EVIDENCE	USA	EVIDENCE	UK	EVIDENCE	AUST	EVIDENCE
High-level Political Commitment	Political commitment from government is crucial, as it may facilitate physical activity promotion on the political agenda, particularly if the commitment is officially announced to the public.	Yes	Support for UN declaration	Yes	The US National Physical Activity Plan; ¹⁴² Healthy People 2020 ¹⁴³	Yes	Be Active, Be Healthy: A Plan for Getting the Nation Moving ¹⁴⁴	Yes	The Physical Activity Taskforce: The Physical Activity Strategic Directions Project ¹⁴⁵
Integration in National Policies	A national policy in which physical activity has a central place may foster the implementation of a national physical activity plan. A policy on physical activity may be a stand-alone document or be integrated within policies addressing the prevention and control of non-communicable disease, or health promotion.	No	–	Yes	Healthy Eating and Physical Activity Across Your Lifespan (NIDDK); ¹⁴⁶ Healthy People 2020 ¹⁴³	Yes	Choosing Activity, a Physical Activity Action Plan; ¹⁴⁷ Sport England London: The London Plan for Sport and Physical Activity ¹⁴⁸	No	–
Identification of National Goals and Objectives	Clear, concise and measurable goals. Stated goals should be complemented with a set of specific objectives. These can be stated at the national, regional and/or local level. It may also be useful to distinguish short-, medium- and long-term objectives.	No	–	Yes	Healthy People 2020 ¹⁴³	Yes	The Welsh Assembly Government: Strategy for Sport & Physical Activity ¹⁴⁹	Yes	National Partnership Agreement on Preventative Health ¹⁵⁰
Funding	Funding may come from governmental, non-governmental and/or private sectors, and should be sufficient and sustainable for the type and scale of policy or plan being pursued.	?	Sport Matters, 2011; ¹⁵¹ von Tigerstrom et al., 2011 ¹⁵²	?	–	Yes	DCMS planned expenditure baseline allocations for 2011-2012; ¹⁵³ DCSM Business Plan 2011-2015 ¹⁵⁴	Yes	Budget Strategy and Outlook 2011-2012 ¹⁵⁵
Support From Stakeholders	A network of relevant stakeholders and effective collaboration is necessary for implementing physical activity programs in specified settings and to disseminate health messages on physical activity through relevant media.	Yes	Active Canada 20/20 ¹⁵⁶	Yes	The US National Physical Activity Plan ¹⁴²	Yes	WHO review of physical activity promotion policy development and legislation in European Union member states ¹⁵⁷	?	–
Integration of Physical Activity Within Other Related Sectors	National policies and plans on physical activity should be coherent with, and complementary to, national policies and action plans addressing other areas. While the promotion of physical activity can require direct interventions, there are advantages to working with opportunities to promote physical activity through indirect or complementary interventions.	No	–	Yes	Physical Activity Guidelines for Americans; ¹⁵⁸ Healthy Eating and Physical Activity Across Your Lifespan (NIDDK); ¹⁵⁹ Healthy People 2020 ¹⁴³	Yes	WHO review of physical activity promotion policy development and legislation; ¹⁵⁷ Be Active, Be Healthy: A Plan for Getting the Nation Moving ¹⁴⁴	No	–

ELEMENTS	DESCRIPTION	CAN	EVIDENCE	USA	EVIDENCE	UK	EVIDENCE	AUST	EVIDENCE
Target Whole Population as Well as Specific Population Groups	National action plan should include large-scale interventions to reach the whole population and enhance physical activity at population level. In addition, some interventions may be tailored to specific population groups.	Yes	Canadian Physical Activity Guidelines ^{8,58}	Yes	Healthy People 2020 ¹⁴³	Yes	UK physical activity guidelines ¹⁷	Yes	Australia's Physical Activity Recommendations ¹⁶⁰
National Physical Activity Guidelines	National guidelines or recommendations on physical activity for the general population or specific population groups are important to educate the population on the frequency, duration, intensity and types of physical activity necessary for health.	Yes	Canadian Physical Activity Guidelines ^{8,58}	Yes	Physical Activity Guidelines for Americans ¹⁵⁸	Yes	UK physical activity guidelines ¹⁷	Yes	Australia's Physical Activity Recommendations ¹⁶⁰
Monitoring and Evaluation	Evaluation and ongoing monitoring of the process and outcomes of actions for the promotion of physical activity is necessary in order to examine program success and to identify target areas for future plans of action.	Yes	AHRC Report Card on Physical Activity; ²⁰ Canadian Health Measures Survey; ¹⁶¹ CFLRI's CANPLAY, population studies and setting-based surveys (e.g., school, municipal, parent)	Yes	CDC's National Health and Nutrition Examination Survey ¹⁶²	Yes	NHS' statistics on obesity, physical activity and diet: England ¹⁶³	Yes	2007 Australian National Children's Nutrition and Physical Activity Survey; ¹⁶⁴ 2011/13 Australian Health Survey ¹⁶⁵

15 Significant Initiatives in Canada in the Last Year

There have been at least 15 significant initiatives related to childhood obesity and physical inactivity in Canada between September 2010 and September 2011. These include the:

1. Announcement of a Federal-Provincial-Territorial framework for action to promote healthy weights
2. Implementation of the nutrition labelling initiative
3. Launch of the CBC's Live Right Now campaign
4. Announcement of the Public Health Agency of Canada's innovation strategy funding related to obesity
5. Publication of the Canadian Health Measures Survey physical activity findings
6. Release of new Canadian physical activity guidelines
7. Launch of ParticipACTION's Think Again campaign
8. Workshop on building trust to address the epidemic of obesity
9. Start of the Canadian Pediatric Weight Management Registry
10. Initiation of Our Health Our Future: a national dialogue on healthy weights
11. Release of the 2011 Active Healthy Kids Canada Report Card on Physical Activity for Children and Youth
12. Canadian Obesity Network's National Obesity Summit
13. Nature Play Day and Sports Day in Canada
14. Development of the Canadian Assessment of Physical Literacy
15. Creation of Active Canada 20/20

The diversity and intensity of activity addressing the childhood obesity and physical inactivity "epidemic" in Canada is encouraging, and must be maintained and enhanced.¹⁶⁶

D

Federal Government Strategies

THE GRADE FOR THE FEDERAL GOVERNMENT STRATEGIES INDICATOR IS A D, which reflects the fact that Canada is falling behind peer nations when it comes to federal government strategies for physical activity (Table 8). Many countries have a national strategy focused specifically on physical activity promotion. No such strategy exists in Canada.

YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	C-	-	C	C+	C	C+	C	D

KEY FINDINGS

- > Once a leader, Canada is falling behind peer countries – Canada currently has no national physical activity strategy.
- > 60% of Canadians think the federal government is not doing enough to deal with the problem of childhood obesity.¹⁴¹

RECOMMENDATIONS

- > The federal government should:
 - Approve a multi-year financial commitment providing sustained funding to organizations and programs providing physical activity leadership.
 - Endorse, support and fund the implementation of Active Canada 20/20.
 - Work with the physical activity sector organizations in Canada to complete, endorse, implement and fund a comprehensive national physical activity strategy.

RESEARCH GAPS

- > Increased understanding and transparency is needed around policy development and prioritization.

As stated in the Provincial/Territorial Government Investments indicator (page 78), there is an estimated \$15 billion sport, physical activity and recreation infrastructure deficit in Canada. This deficit represents the investment required to repair and/or replace existing sport, physical activity and recreation facilities and to create new facilities in underserved communities. There has not been a comprehensive, national strategy for sport, physical activity and recreation infrastructure since 1967, with the result that an estimated 67% of current facilities need to be repaired or replaced.¹⁵¹

The advantage of a national infrastructure strategy is a more coordinated and effective guide to infrastructure investment based on principles, eligibility criteria and priorities along with collaboration between all levels of government and the sport and recreation sectors. In its policy brief, *Sport 2.0: Towards a New Era in Canadian Sport*, the Sport Matters Group identifies 3 key components to a national infrastructure strategy:

1. A dedicated national sport and recreation infrastructure fund enabling municipalities, sport and recreation organizations, and provincial/territorial governments to engage in coordinated, multi-year, strategic planning.
2. National sport-specific facilities based on a needs assessment for each sport.
3. Four Canadian Sport Institutes where high-performance athletes can be housed, trained and supported.¹⁵¹

For more information on Sport Matters Group's policy brief, visit www.sportmatters.ca/files/SMG%20documents/Towards_A_New_Era_2.0_SMG.pdf.

The United Nations Draft Declaration on Non-Communicable Diseases

On September 19, 2011, the United Nations launched an all-out attack on NCDs such as heart disease, cancer and diabetes with a summit meeting devoted to curbing the primary lifestyle factors linked with NCD development (diseases responsible for 63% of all deaths). The 2-day high-level General Assembly meeting, attended by more than 30 heads of state and governments as well as at least 100 other senior ministers and experts, adopted a declaration calling for a multi-pronged campaign by governments, industry and civil society to set up by 2013 the plans needed to curb the risk factors behind the 4 groups of NCDs – cardiovascular diseases, cancers, chronic respiratory diseases and diabetes.

Steps range from price and tax measures to reduce tobacco consumption, to curbing the extensive marketing to children (particularly on television) of foods and beverages that are high in saturated fats, trans-fatty acids, sugars or salt. Other measures seek to cut the harmful consumption of alcohol, promote overall healthy diets and increase physical activity.

Secretary-General Ban Ki-moon called on governments, individuals, civic groups and businesses to all play their part, and stressed the need for international cooperation to tackle the problem. For more information, visit www.un.org/apps/news/story.asp?NewsID=39600&Cr=non-communicable+diseases&Cr1.

Active Transportation Resource and Planning Guide

In 2011, Infrastructure Canada released *Active Transportation in Canada: A Resource and Planning Guide*, which is a resource tool for transportation planners and related professionals (e.g., city or town planners, town engineers) to accommodate, promote and support active transportation in current and long-range planning and development. The guide discusses the importance of active transportation, gives an overview of what is being done in Canada to improve active transportation, and provides a planning approach for developing active transportation projects and/or incorporating active transportation into existing policy documents.

For more information, visit www.tc.gc.ca/eng/programs/environment-urban-guidelines-practitioners-atg-2671.htm.



HACKY SACK
Child's Toy

B+

Provincial/Territorial Government Strategies

THE GRADE FOR THE PROVINCIAL/TERRITORIAL GOVERNMENT STRATEGIES INDICATOR IS A B+ FOR THE 3RD YEAR IN A ROW due to the fact that the majority of provinces in Canada have developed specific physical activity strategies.

YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	INC	-	C	C+	C+	B+	B+	B+

KEY FINDINGS

- > The majority of Canadian provinces and territories have developed specific physical activity strategies.

RECOMMENDATIONS

- > Provincial/territorial physical activity strategies should be reviewed regularly to ensure they are meeting the public's needs and having an impact.

RESEARCH GAPS

- > There is a need for baseline and evaluation data of provincial/territorial physical activity strategies.

It is encouraging to see different provincial/territorial strategies and recommendations being released to prevent childhood obesity and increase physical activity levels. Though not exhaustive, some of these recent strategies and recommendations are summarized below. To read about other strategies, see the Provincial/Territorial pages on page 86.

Taking Action to Prevent Chronic Disease: Recommendations for a Healthier Ontario

In 2007, chronic diseases (e.g., cancers, cardiovascular diseases, chronic respiratory disease and diabetes) were responsible for 79% of all deaths in Ontario. Review of the evidence confirms there are strong associations between 4 modifiable risk factors (tobacco, alcohol consumption, physical inactivity and unhealthy eating) and the most common chronic diseases. Rising chronic disease incidence, burden and costs are not inevitable. Evidence-informed interventions that focus on reducing exposure to these risk factors can reduce the burden of chronic diseases in Ontario. A recent report, *Taking Action to Prevent Chronic Disease: Recommendations for a Healthier Ontario*, makes 21 recommendations for evidence-informed interventions to help achieve these objectives. The recommendations focus on how Ontario can:

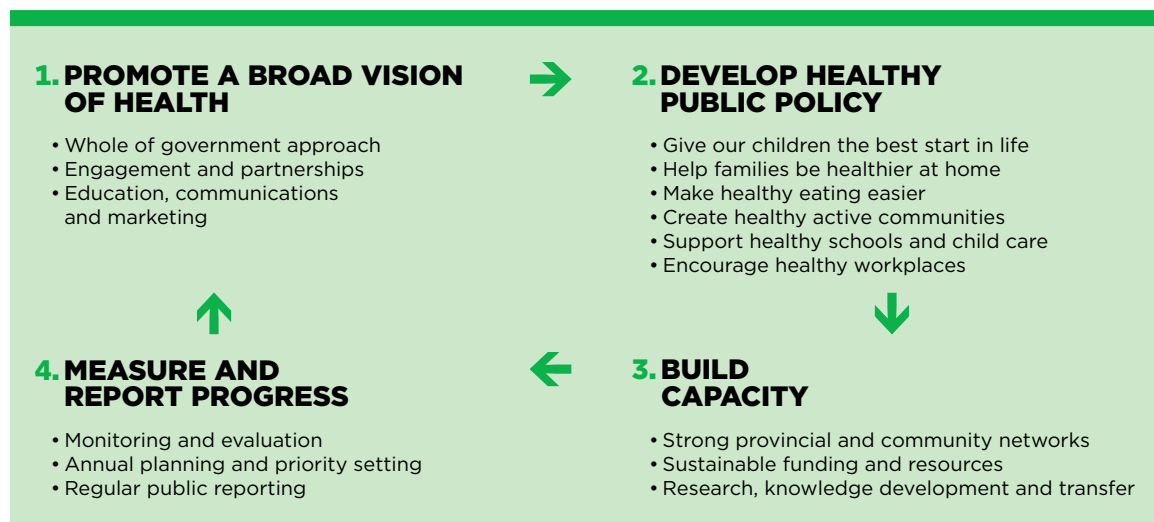
- Reduce exposure to the 4 main risk factors
- Build capacity for chronic disease prevention
- Work toward health equity

Recommendations related to physical activity are twofold: first, the Ontario Ministry of Education should evaluate the implementation, feasibility and quality of the DPA policy in Ontario elementary schools. Grades 1-8 students in Ontario are currently required to have a minimum of 20 minutes of MVPA each day during instructional time, which may be a part of PE class but is designed to replace PE on days when it is not scheduled or when PE class does not include MVPA. However, the implementation and quality of DPA in Ontario elementary schools is unclear. Second, the Ontario Ministry of Education should require that high school students take 1 PE credit in every grade from 9 to 12 to qualify for high school graduation. Currently, high school students are only required to take 1 PE credit in any grade to qualify for graduation. For more information, visit www.cancercare.on.ca/common/pages/UserFile.aspx?fileId=125697.

Growing Up Healthy: A Discussion Framework for a Childhood Obesity Strategy

In 2011, the Government of Nova Scotia released a discussion framework to guide development of a strategy to prevent childhood obesity and create environments that support better health for all Nova Scotians. The framework was used to gather general input from 800+ individuals and organizations into the strategy and to develop priorities and actions under 4 key directions illustrated in Figure 33. A childhood obesity strategy will be released this year. For more information, visit www.gov.ns.ca/growinguphealthy.

Figure 33. A Discussion Framework for a Childhood Obesity Strategy (Adapted From: Government of Nova Scotia).



F	Federal Government Investments							
	<p>THE GRADE FOR THE FEDERAL GOVERNMENT INVESTMENTS INDICATOR IS AN F FOR THE 3RD YEAR IN A ROW. Though the federal government invests a large amount of money on health, only a small percentage of these funds (1%) is earmarked for health promotion. Furthermore, only a fraction of this 1% is devoted to physical activity promotion in children and youth.</p>							
YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	C-	-	C	C+	C	F	F	F

KEY FINDINGS

- > 90% of Canadians think the federal government should fund more recreational facilities for youth and make it easier for children to walk and bike daily.¹⁴¹
- > In partnership with provincial/territorial governments, sports organizations and community partners, the federal government has contributed \$500 million of a total investment of over \$3 billion to sport, physical activity and recreation facilities between 2008 and 2010.¹⁵¹ (For more information on this finding, see the Provincial/Territorial Government Investments indicator on page 78.)
- > The Children's Fitness Tax Credit represents between \$90 million and \$115 million in annual federal tax revenue.^{152,167}

RECOMMENDATIONS

- > The Children's Fitness Tax Credit should continue with a greater maximum allowed; revisions should be made to benefit those not currently being favoured by the current policy (i.e., because of income disparities).
- > A long-term investment strategy is needed to implement a national physical activity strategy to honour the recent UN Declaration on NCDs.
- > More investment is needed in active transportation infrastructure for daily walking and biking in order to change physical activity levels at the population level.

RESEARCH GAPS

- > Data are needed on the effectiveness of tax expenditures in promoting physical activity in the Canadian population. No studies have yet assessed the impact of fitness tax credits on physical activity levels in the population.^{152,167}
- > A comparison needs to be made of tax credits vs. tax exemptions in terms of uptake by lower-income families.
- > An examination is required of trends in federal spending on physical activity infrastructure, programming and promotion.

The Constitution of Canada, the fundamental law of the land, restricts the federal government's legislative authority in the sphere of health and, by extension, in physical activity promotion; these fall under provincial jurisdiction. Under the Constitution, the federal government has legislative authority over health only as it relates to "quarantine and the establishment and maintenance of marine hospitals."¹⁶⁸ Though the federal government has no direct legislative authority over physical activity promotion in Canada, indirect means (e.g., federal spending) are available by which physical activity promotion may be influenced federally. As one health researcher notes, "the provision for spending authority enables the federal government to spend and act in areas where it has no direct regulatory power (such as Medicare, physical activity promotion, etc.) provided that is not deemed to amount to a regulatory scheme falling within Provincial jurisdiction."¹⁶⁹ Federal government expenditures on physical activity promotion from 1961 to 2009 (in 2008 dollars per capita) are summarized in Figure 34. As reported in previous Report Cards, federal expenditures peaked in the 1980s and have since declined.¹⁶⁹

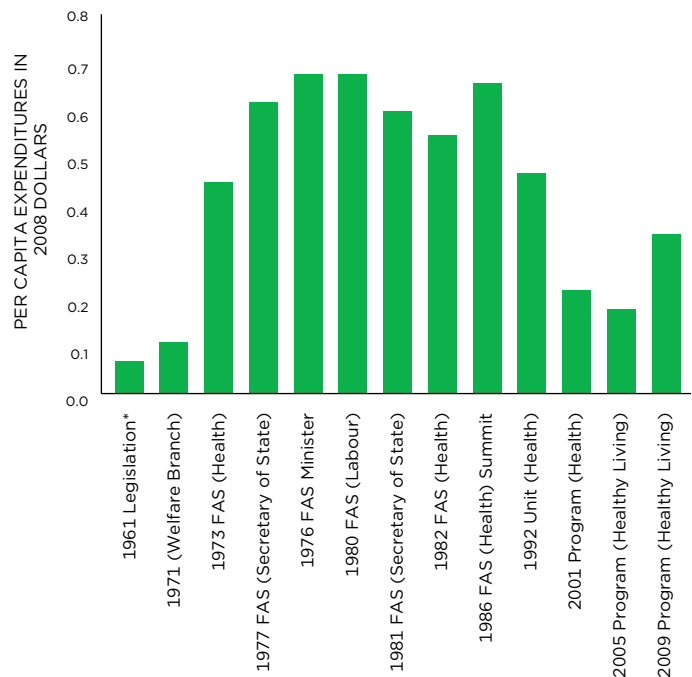
Using the Tax Code to Promote Physical Activity

Every year the federal government implements public policies directly through program spending, but also indirectly through tax expenditures (spending via the tax code). In fact, Canada is a leader in the use of tax expenditures having 50% more above the Organisation for Economic Co-operation and Development's average.¹⁷⁰ These expenditures – whether tax credits, deductions or exemptions – encourage certain behaviours among the population and, therefore, serve as public policy instruments just as government program spending does. Some of the advantages and disadvantages of program spending and tax expenditures from a governmental perspective are illustrated in Table 9.

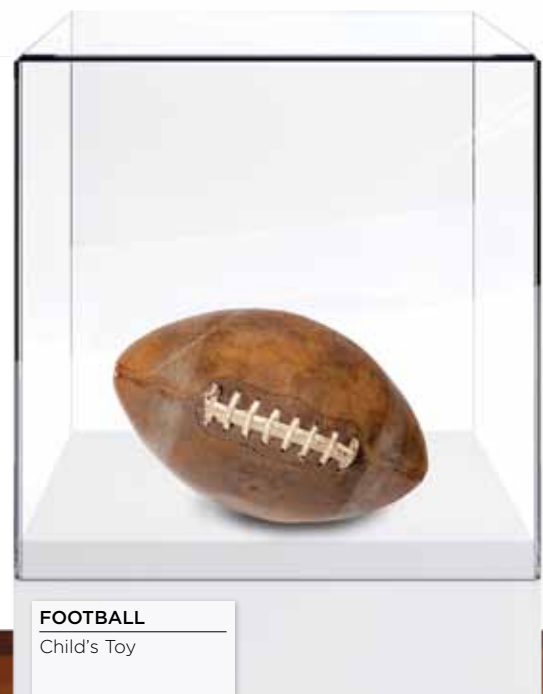
Table 9. Program Spending vs. Tax Expenditures (Source: Jacques, 2011¹⁷¹).

	PROGRAM SPENDING	TAX EXPENDITURES
Administrative Cost	High	Low
Taxpayer Choice	Low	High
Access Control	High	Low

Figure 34. Federal Expenditures on Physical Activity Promotion by Responsibility Centre, 1961 to 2009, Per Capita in 2008 Dollars. (Source: Adapted From Craig, 2011¹⁶⁹)



* 1961 data included expenditures on provincial transfer payments only. Provincial transfers commenced in 1961, ceased in 1970, and were reinstated under the 2005 Healthy Living Strategy and included in 2009 expenditures. FAS: Fitness and Amateur Sport Branch. Source: Adapted from Craig, 2011¹⁶⁹



Projected program spending and tax expenditures for the current fiscal year (April 1, 2011 – March 31, 2012) are \$250 billion and \$100 billion respectively (Jacques, 2011), which represent approximately 22% of Canada’s \$1.6 trillion in gross domestic product (GDP).¹⁷² Though tax expenditures have grown in value as a percentage of GDP and in total number, the reporting and scrutiny of tax expenditures remain areas for improvement. At present, these expenditures do not receive the same level of formal review as program spending (Table 10), which undergoes close scrutiny every 5 years to ensure relevance and effectiveness.¹⁷⁰ In fact, Finance Canada admits there is “no formal mechanism for tax expenditure review by cabinet after provisions have been approved in the budget.”¹⁷⁰ The effectiveness of tax expenditures in promoting physical activity requires assessment since ineffective tax expenditures would represent not only a waste of time but the relinquishment of tax revenue that might have been spent in more cost-effective ways.

The Children’s Fitness Tax Credit (CFTC), which has also been discussed in the past 2 Report Cards,^{20,48} illustrates some of the limitations of using tax expenditures to promote physical activity. Though the CFTC represents between \$90 million and \$115 million in annual federal tax revenue, only 5.2% and 5.9% of Canadian tax filers claimed the credit in 2007 and 2008 respectively.¹⁵² The noticeable impact of this tax incentive on physical activity promotion in Canada generally is doubtful given the low proportion of claims. However, among tax filers with children and youth, more than half claimed the CFTC.¹⁷³ Of further concern is whether a credit like the CFTC, which returns no more than 15% of the total amount claimed, constitutes a strong incentive to be physically active. Another factor that may cancel a tax credit’s intended incentive is the time lag from when the cost of the physical activity program was incurred to when the credit was received on one’s annual tax return which, in the case of the CFTC, could be as great as 12 months. Tax credits also tend to be ineffective for people in lower socio-economic categories, who are often unaware of them and/or fail to use them. For instance, in the first 2 years of its existence, only 1% of tax filers in the lowest income categories claimed the credit, while 20% in the highest income categories claimed it.¹⁷³ This is unfortunate given the socio-economic disparities in physical activity. Those in low socio-economic groups, who stand to gain the most from the CFTC, tend not to use it or qualify for it. For example, a person owing no taxes in a given year is not able to claim the CFTC since it is a non-refundable tax credit requiring a balance owing for the credit to be rebated against the balance.¹⁵²

Table 10. Review of Program Spending vs. Tax Expenditures
 (Source: Jacques, 2011¹⁷¹).

	PROGRAM SPENDING	TAX EXPENDITURES
Statutory Framework	Yes	No
Comprehensive 5-Year Coverage	Yes	No
Peer Review	Yes	No
Public Release	Yes	Sporadic

Tax exemptions avoid many of the pitfalls of tax credits. For example, a sales tax exemption takes effect immediately and offsets the cost of a physical activity program at the point of sale. Unlike tax credits, exemptions can influence people who are not even aware of them and can influence a large array of behaviours more efficiently than a tax credit. For example, individuals may not be aware of a tax exemption on a bicycle helmet. However, when they purchase a bicycle helmet, the tax exemption takes effect, thereby offsetting the cost of their bicycling. Challenges for tax exemptions involve problems of calculation: how large should the exemption be, and which goods and services related to physical activity should be included?¹⁵²

Though the federal government’s use of the tax system for physical activity promotion is encouraging, data are needed on the effectiveness of these tax expenditures. The limitations of tax expenditures may require the federal government to use other means of spending to change physical activity levels at the population level.¹⁶⁷



SNEAKER
 Child's Footwear

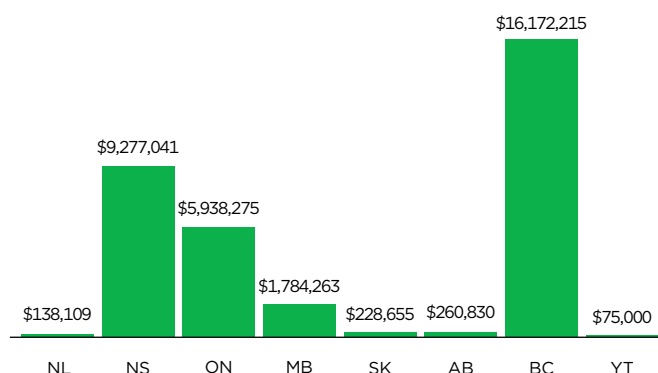
Government Investment in Active Transportation Infrastructure

The Gas Tax Fund in Canada represents an important source of financial support for active transportation infrastructure (e.g., sidewalks, bicycle paths). This Fund represents a \$13 billion investment between 2005 and 2014. Every municipality in Canada receives a portion of the Fund since allocations are determined at the provincial or territorial level based on population. Funding is provided up front twice a year to provincial and territorial governments or to the municipal associations that then deliver this funding within a province. Projects are chosen locally and prioritized according to the infrastructure needs of each community. The Fund supports municipal infrastructure projects that contribute to cleaner air and water, and to the reduction of greenhouse gas emissions. The projects fall into the following categories:

- Drinking water
- Waste water infrastructure
- Public transit
- Community energy systems
- Solid waste management
- Local roads

Between 2005 and 2010, \$34,324,388 has been allocated from the Gas Tax Fund to support 207 active transportation projects across Canada, including bike lanes; sidewalks; shorelines; walkways; improvements to parks, bike and trail networks; and traffic education campaigns. This allocation represents almost 1% of Gas Tax Fund spending.⁸⁹ Figure 35 depicts the provincial/territorial breakdown of this allocation.

Figure 35. Allocation of Monies from the Gas Tax Fund for Active Transportation Projects, by Province/Territory, 2005-10 (Source: Based on Data From Infrastructure Canada⁸⁹). Note: Data are Not Available for All Provinces/Territories.



Federal Spending on Prevention

Total healthcare spending by all levels of government is approximately \$200 billion per year (Table 11). Unfortunately, less than 1% of this spending is devoted to health promotion, physical activity/education and sport. The Sport Matters Group has recently proposed a 5% (\$10 billion) earmark on the \$200 billion spent annually on health care for prevention-based programs centred on health promotion, physical activity, nutrition and sport.¹⁷⁴ A relatively small increase in spending on prevention-based programs may go a long way in the development of healthy behaviours among Canadian children and youth, and lead to sustainability in Canada's healthcare system.

Table 11. Total Federal Spending Devoted to Health Promotion, Physical Activity/Education and Sport, 2011-12 Budget Estimates (Source: Sport Matters Group).

BUDGET	PROGRAM SPENDING
PHAC* budget for health promotion	\$182,153,800
PHAC* budget for disease and injury prevention	\$107,333,000
Sport Canada budget	\$206,708,000
TOTAL	\$496,194,800

* PHAC = Public Health Agency of Canada

C-

Provincial/Territorial Government Investments

THE GRADE FOR THE PROVINCIAL/TERRITORIAL GOVERNMENT INVESTMENTS INDICATOR IS A C- FOR THE 3RD YEAR IN A ROW, which reflects good investment in several provinces. However, the fact that ministries of health promotion have been amalgamated back into healthcare ministries in several provinces raises cause for concern about provincial/territorial government investment.

YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	INC	-	C	C+	C+	C-	C-	C-

KEY FINDINGS

- > Less than 1% of total healthcare spending in Canada is devoted to health promotion, physical activity/education and sport.¹⁷⁴
- > In partnership with the federal government, sports organizations and community partners, provincial/territorial governments have invested over \$3 billion in sport, physical activity and recreation facilities between 2008 and 2010.¹⁵¹
- > Provincial tax credits in 5 provinces and territories (Manitoba, Nova Scotia, Ontario, Saskatchewan, Yukon) represent approximately \$95 million in annual tax revenue.¹⁶⁷

RECOMMENDATIONS

- > The government needs to improve the level of funding devoted to health promotion, including physical activity promotion, physical education and sport, to reflect the realities of cost savings to be attained in the future as a result of a more physically active population. At the least, the money devoted should double.
- > We need to ask ourselves the question: "Are we investing in the right facilities and programs, and getting a good return on investment from a physical activity perspective?"

RESEARCH GAPS

- > An examination is required of trends in provincial/territorial spending on physical activity infrastructure, programming and promotion.

According to an estimate from 2006, there is a \$15 billion deficit in sport, physical activity and recreation infrastructure in Canada. This deficit represents the investment required to repair and/or replace existing sport, physical activity and recreation facilities, and to create new facilities in underserved communities. There has not been a comprehensive, national strategy for sport, physical activity and recreation infrastructure since 1967, with the result that an estimated 67% of current facilities need to be repaired or replaced.¹⁵¹

Between 2008 and 2010, governments across the country responded to this deficit by investing over \$3 billion in sport, physical activity and recreation facilities. This investment has come through cost sharing between governments. A total of \$500 million has come from the federal government through the new federal Recreation Infrastructure Program (RInC) along with other funding from the Building Canada Fund, the Infrastructure Stimulus Fund and the Small Communities Fund. Provincial/territorial governments have either matched or exceeded the investments from federal coffers. Sports organizations and community partners have also put forward resources.¹⁵¹ As one example, the Ontario Government invested almost \$200 million in different facilities including arenas, gymnasiums, sports fields, swimming pools, parks, fitness trails, bike paths and other facilities. For more information on the funds contributed from RInC and the projects funded, visit www.ic.gc.ca/eic/site/ic1.nsf/eng/04739.html.

Estimated Spending on Sport, Recreation and Health Promotion by Provincial/Territorial Governments

As mentioned in the Federal Government Investments indicator (see page 74), total healthcare spending by all levels of government is approximately \$200 billion per year. Table 12 illustrates total spending by provincial/territorial governments.

Table 12. Total Spending by Provincial/Territorial Governments Devoted to Sport, Recreation and Health Promotion, 2011-12 Estimates (Source: Sport Matters Group¹⁵¹).

PROVINCE/TERRITORY	DEPARTMENT	SPENDING
NL	Recreation & Sport; Public Health & Wellness	\$17,446,100
NS	Physical Activity, Sport & Recreation; Public Health	\$43,087,000
NB	Wellness, Sport & Community Development, and Public Health Service	\$30,109,000
PE	Sport, Recreation & Healthy Living, and Public Health	\$10,120,800
QC	Sport, Recreation & Physical Activity, and Healthy Lifestyle Fund	*\$107,235,000
ON	Health Promotion & Sport Programs	\$471,000,000
MB	Sport, Recreation and Healthy Living	\$23,197,000
SK	Sport & Recreation; Active Families Benefit & Sask Sport	\$223,315,000
AB	Recreation & Sport, Community Programs & Healthy Living	\$145,941,000
BC	Ministry of Community, Sport & Cultural Development; Health	\$180,002,000
NT	Sport Recreation & Youth, and Community Wellness	\$13,106,000
YT	Sport & Recreation; Community Health	\$10,067,000
NU	Sport & Recreation; Public Health	\$20,204,000
TOTAL		\$1,294,829,900

* The Government of Quebec did not provide information on the spending it devotes to health promotion; therefore, the estimated spending for Quebec under-reports that activity.

A-	Non-Government Strategies							
	THE GRADE FOR THE NON-GOVERNMENT STRATEGIES INDICATOR IS AN A-, which reflects the broad sector engagement of Active Canada 20/20 and the Canadian Physical Activity and Sedentary Behaviour Guidelines for the Early Years (Aged 0-4 Years) (see pages 6 and 7 respectively).							
YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	-	-	INC*	C+*	B-*	C*	C*	A-

* In previous years, the grade reflected both non-government strategies and investments. This year, non-government strategies are graded on their own.

KEY FINDINGS

- > In the absence of a national physical activity strategy, the non-government sector has stepped up to fill the void with initiatives such as Active Canada 20/20, a national physical activity strategy, and the publication of the Physical Activity and Sedentary Guidelines for the Early Years (Aged 0-4 Years).

RECOMMENDATIONS

- > Organizations that promote physical activity in children and youth should continue to take advantage of the large voluntary sector that exists in Canada, and optimize volunteering and giving by understanding the factors that influence both activities (e.g., economic conditions, demographics, social values, public policies).

RESEARCH GAPS

- > Data are needed on corporate strategies to allow for a more comprehensive understanding of the private sector's role in physical activity promotion in Canada.

Figure 36. The Active Canada 20/20 Framework for Action
(Source: Active Canada 20/20¹⁵⁴; Adapted From Diagram Developed by Nicoleta Cutumisu).



Though there is the Pan-Canadian Healthy Living Strategy (which is designed to help sectors align and coordinate efforts to address chronic disease risk factors, such as physical inactivity), there is currently no national, government-led physical activity strategy in Canada. Notwithstanding this gap, the non-government sector has forged ahead with the development of a national strategy. Led by ParticipACTION, and with broad sector involvement, Active Canada 20/20 is a Canadian physical activity strategy nearing completion that will provide a clear vision and a change agenda describing what Canada must do to increase physical activity and reduce sedentary behaviour. Active Canada 20/20 is being designed to engage policy-makers and rally the efforts of stakeholders at every level to make a difference in the physical activity levels of all Canadians including children and youth. The framework for action is illustrated in Figure 36. For more information, visit www.activecanada2020.ca.

The Heart and Stroke Foundation: Advocating for Heart Healthy Children and Youth

The twin epidemics of physical inactivity and unhealthy eating are putting the health of our children at risk.

Children are a major priority for the Heart & Stroke Foundation (HSF) because, without decisive action, today's children could become the first generation to have shorter lifespans than their parents. And every child deserves a healthy future. The HSF has set out to actively engage government decision makers across Canada in an effort to address these issues.

A comprehensive advocacy strategy has been developed to support this organization-wide commitment to creating a healthier future for Canadian children, and to promote the Heart Healthy Children and Youth agenda to all levels of government. Plans initially focus on creating healthier school environments, and specifically address 2 common issues:

- healthy school curricula policies and programs
- healthy community design that supports active transport to school, community use of schools and more active play spaces

The Heart Healthy Children and Youth goal is to reduce the number of overweight or obese children in Canada by 50% within 1 generation. In working toward this goal we all support the initiative's vision: that all children and youth will grow up healthy with access to physical activity and healthy eating where they live, learn, and play.



INC	Non-Government Investments							
	THE GRADE FOR THE NON-GOVERNMENT INVESTMENTS INDICATOR IS AN INC (INCOMPLETE) due to a lack of gradable data.							
YEAR	2005	2006	2007	2008	2009	2010	2011	2012
GRADE	-	-	INC*	C+*	B-*	C*	C*	INC

* In previous years, the grade reflected both non-government strategies and investments. This year, non-government investments are graded on their own.

KEY FINDINGS

- > Sport and recreation organizations received 17% of all volunteer hours in 2007, second only to religious organizations at 18% (2007 CSGVP).
- > They received 2% (\$200 million) of all donations given by Canadians (2007 CSGVP).
- > Though sport and recreation organizations have seen a 4% decline in donation rates between 2004 and 2007, average donation amounts have increased 29% between these years from \$45 to \$58 per donation (2007 CSGVP).

RECOMMENDATIONS

- > Voluntary organizations need to develop advocacy tactics on physical activity aimed at decision makers at local, provincial and federal levels.

RESEARCH GAPS

- > Data are needed on corporate investments in Canada to allow for a more comprehensive understanding of the private sector's role in physical activity promotion.

Strategies and investments for physical activity promotion may be categorized according to the 3 pillars of Canadian society: the public sector, the private sector and the voluntary sector. The Non-Government Investments indicator concentrates on data from the last 2 of these 3 societal pillars. With previous Report Cards, the focus has been on non-profit organizations and private corporations. This year, the indicator will look more closely at private citizens in Canada and their contributions to physical activity promotion through volunteering and charitable giving.

Volunteering in Canada

Canada is home to one of the largest voluntary sectors in the world. Approximately half of all Canadians over the age of 15 years volunteer their time and energy for different causes during the course of the year, according to recent research that involved a literature search of 200 documents, a telephone survey of 1,000+ households, a survey of 500+ volunteers and 18 focus groups across Canada.¹⁷⁵ This volunteer work translates into 2 billion hours of volunteer time per year or an average of 168 hours per volunteer. One report equated this to more than one million full-time jobs.¹⁷⁶ If these hours were remunerated at a minimum wage rate of \$10 per hour, annual volunteer work in Canada would amount to \$20 billion in investment. The 2007 Canada Survey on Giving, Volunteering and Participating (2007 CSGVP) reports a 5.7% increase in the total number of volunteers between 2004 (11.8 million) and 2007 (12.5 million).¹⁷⁶

Canadian volunteers are most likely to give of their time for 1 of the following 4 types of organizations: sport and recreation (11%), social services (11%), education and research (10%), or religious (10%). When broken down by volunteer hours, religious organizations receive the most (18%) followed by sport and recreation (17%), social services (16%), and education and research (11%).¹⁷⁶ For sport and recreation organizations, the 17% represents 340 million volunteer hours annually.

Despite the tremendous output of the voluntary sector, previous research suggests that a small number of “über” volunteers contribute the majority of these volunteer hours. This reliance on a small number of people is a significant limitation for the voluntary sector, which may signal a disconnect between volunteer experiences available from organizations and volunteer experiences sought after by would-be volunteers. To preserve the strength of the voluntary sector in Canada, it is important for non-profit organizations to understand what gaps create these disconnects. Recent research from Volunteer Canada reveals the following gaps:

- Many volunteers are looking for group activities, but few organizations can offer such activities.
- Many volunteers have professional skills, but are looking for volunteer tasks that do not require the use of these skills.
- Organizations are expected to clearly define the roles for volunteers, but volunteers also desire the flexibility to define the roles, at least in part.
- Many organizations desire long-term commitments from volunteers, but many volunteers desire short-term commitments.
- Many organizations focus on their own goals, but many volunteers have their own goals in addition to helping the organization and others.¹⁷⁵

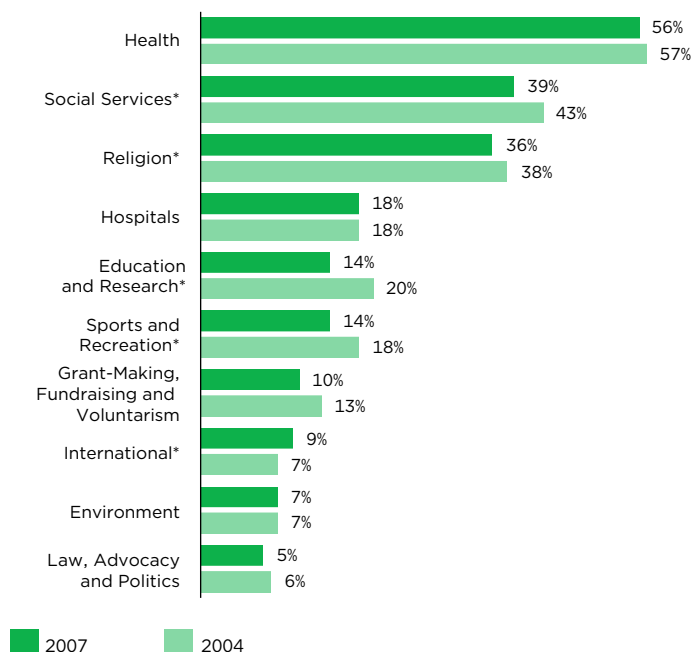
To optimize the recruitment and retention of volunteers, organizations need to structure themselves and understand the motivations and interests of today's volunteers such that the aforementioned gaps are minimized, which may create disconnects affecting the number of volunteers and volunteer hours available to the voluntary sector. Though this applies generally to all volunteer-involving organizations, it may also be true of organizations that rely on volunteers to help with physical activity promotion in children and youth. Indeed, volunteers are ubiquitous throughout physical activity-related organizations in Canada. For example, sport volunteerism is the largest segment of Canada's voluntary sector.¹⁷⁷ The Coaching Association of Canada has reported on 2 million volunteers in Canada who serve as coaches, sport officials, sport administrators, event organizers, fundraisers and facility maintainers. Without these volunteers, the sports landscape in Canada would be fundamentally altered.¹⁷⁷ Estimates suggest that 18,500 volunteers were involved with the 2010 Winter Olympic Games in Vancouver, 95% of whom were Canadian;¹⁷⁸ compare this to the estimated 10,000 volunteers at the 1988 Winter Olympic Games in Calgary.¹⁷⁹ Similarly, 1,500 volunteers helped with the 2009 International Ice Hockey Federation World Junior Hockey Championship in Ottawa.¹⁸⁰ Volunteers are also involved in the delivery of recreation and leisure programs as part of neighbourhood community associations such as those in cities like Saskatoon, where an estimated 75,000 hours in volunteer time are used every year.¹⁸¹ Trail associations and hiking clubs that are responsible for thousands of kilometres of pedestrian trails also rely on volunteers who serve as board members, hike leaders, trail maintenance captains and leaders, publicity representatives, membership secretaries, newsletter editors, fundraisers and social directors.¹⁸² Volunteers, often children and youth, also give of their time and energy in therapeutic recreation programs for young people with physical, developmental and communication needs.¹⁸³

Giving in Canada

According to the 2007 CSGVP, which offers the most recent and nationally representative data available, 23 million Canadians, or 85% of the population over the age of 14 years, gave to charities and non-profit organizations, for a total donation of \$10 billion. While the donation rate (85%) was stable between 2004 and 2007, more dollars in donations were given in 2007 (\$10 billion) than in 2004 (\$8.9 billion). Sport and recreation organizations – including fitness and wellness centres, and recreation and social clubs – received 2% (\$200 million) of the donations given in 2007 but were the beneficiaries of 14% of donors in that year. Though sport and recreation organizations have seen a 4% decline in donation rates between 2004 and 2007, average donation amounts have increased 29% between these years, from \$45 to \$58 per donation (Figure 37).¹⁷⁶

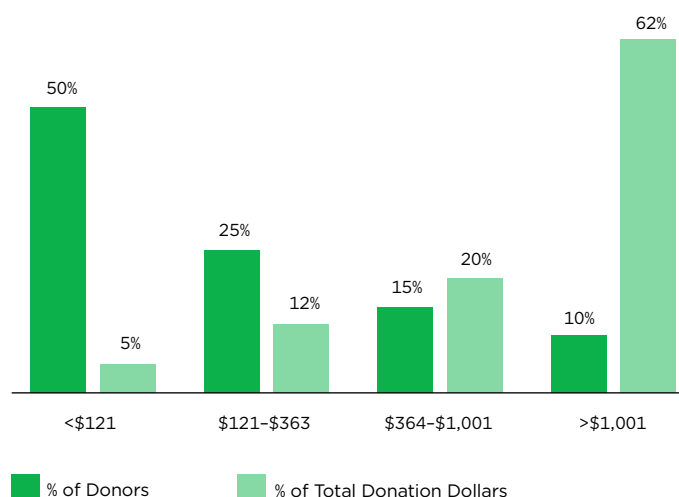
Giving in Canada manifests a similar limitation to volunteering: a large number of Canadians give, but a small minority contributes the majority of donations. To illustrate the point, Figure 38 provides a breakdown of Canadian donors by category and the percentage each donor category contributed to total donations in 2007.

Figure 37. Donation Rate by Organization Type Between 2004 and 2007 (Source: 2007 CSGVP; Statistics Canada, 2009, Catalogue no. 71-542-XIE).



Donors tend to belong to higher socio-economic categories, have more formal education, are married or widowed, are older and tend to be religiously active. Frequently reported motivations for giving include feeling compassion for those in need, believing in the cause and wanting to make a contribution to the community.¹⁷⁶

Figure 38. Distribution of Donors and Percentage of Total Annual Donations (Source: 2007 CSGVP; Statistics Canada, 2009, Catalogue no. 71-542-XIE).



Financial Support for Hockey at the Grassroots Level in Canada

In a survey of 1,006 Canadians conducted by the Royal Bank of Canada and Nanos Research in 2011, 82% said corporate Canada needs to do more to support hockey. Fewer than 50% of respondents said their local league was sufficiently funded. The greatest barriers to hockey were reported to be increasing ice fees (36%), lack of business support (22%) and lack of volunteers (22%).¹⁸⁴

* Represents a statistically significant difference between 2004 and 2007.

Healthy Active Children Program

In 2011, the Lawson Foundation launched a new program, Healthy Active Children. This program emanates from and builds on the Foundation's historical interest in the capacity and power of families and communities to enrich the quality of life.

Healthy Active Children's creation follows a thoughtful exploration phase to learn how children benefit from leading healthy, active lives and how society benefits when the overall health of children and families improves. To inform the exploration, experts and leaders across Canada were consulted to determine how to ensure that the Foundation's limited grant dollars have maximum impact.

The Lawson Foundation envisions a nation whose children lead healthy, active lives from birth onward. The program's goal is a nation that values and exemplifies a healthy, active way of living for children from birth to 18. The program's objectives are:

- To foster attitudes and behaviours in children that will lead them to pursue healthy, active lives; and
- To increase the participation of children and their families in initiatives that result in healthy, active lives.

Grants to date to involve children in healthy, active living include:

- Active Healthy Kids Canada, to support the development and dissemination of the annual Report Card during 2007-13 - \$2,156,500
- Centre Hospitalier Universitaire Sainte-Justine, for The Centre of Excellence for Early Childhood Development's entry on physical activity in the online Encyclopedia on Early Childhood Development - \$41,000
- Children's Hospital of Eastern Ontario (CHEO) Foundation, to support the creation of the Junior Research Chairs program in the Healthy Active Living and Obesity (HALO) Research Group led by Dr. Mark Tremblay at the CHEO Research Institute - \$508,250
- PHE Canada (Physical & Health Education Canada) for Health Promoting Schools, a Canada-wide initiative to support a broad spectrum of activities and services within schools and their communities to help children enhance their health and develop to their full potential - \$1,228,000
- Working Together Initiative through PHE Canada, to continue the groundbreaking work to explore the potential for social sector and public service innovation in sport and physical activity, including the implementation of additional community-based prototype/pilot projects - \$360,000



SCOOTER
Child's Toy

Provincial and Territorial Profile Pages

A Look at Key Policies and Strategies

METHODOLOGY

The Provincial Territorial Network Partners are non-government and governmental organizations that have partnered with Active Healthy Kids Canada to help inform, distribute and communicate the findings of the Report Card in their own jurisdictions. For the 2012 Report Card, Network Partners were asked to contribute content for the following provincial and territorial profile pages. Each partner was provided with a template and survey link to guide the collection of specific information that highlights key physical activity policies or strategies in their region. Partners were invited to collaborate with other colleagues of organizations within their own jurisdiction to provide Active Healthy Kids Canada with the most impactful provincial and territorial child and youth physical activity policies or strategies outlined in the following section.

A profile page for Quebec is available in the electronic version of the long-form Report Card which can be found at www.activehealthykids.ca.



BALL

Child's Toy

Alberta

ACTIVE ALBERTA

Initiated in 2009 and implemented in 2011, the development of Active Alberta involved eleven Alberta Government ministries and consultation with nearly 130 stakeholder groups. The Alberta Tourism, Parks and Recreation, Recreation and Sport Development Division led the development of this initiative. The Recreation and Sport Development Division will take the lead in working with the 11 Ministries and stakeholder groups to work together to develop an implementation plan over the next two years (2011-2013). The target audience is all Albertans, government, non-profit organizations, schools private corporations, communities and individual Albertans. All Albertans can contribute to creating a more Active Alberta. The intent of Active Alberta is to: **Acknowledge** that recreation, active living, and sport are essential to the health, well-being and social needs of all Albertans throughout their lives, whether they are toddlers or teenagers, parents or grandparents, full time workers or full time retirees; Regardless of their skills, interests and abilities, Alberta's value recreational and sport activities and benefit from an active lifestyle; **Reaffirm** the Government of Alberta's commitment to the sector; The Government of Alberta is committed to continuing to support and promote recreation, active living and sport; **Replace** the Active Living Strategy and, over the next ten years, coordinate other provincial policies and strategies that encourage healthy active lifestyle choices to improve Albertans' quality of life, sense of security and overall community healthy and well-being; **Describe** the government's priorities related to recreation, active living and sport; **Confirm** the partnership the Government of Alberta enjoys with other governments, the non-profit sector, educational institutions and the private sector in delivering services and programs to Albertans while clarifying the role of all partners; **Establish** common outcomes for the sector and invite partners to work with

government and with each other to achieve those outcomes; **Guide** Government of Alberta funding decisions and resource allocations related to recreation, active living and sport to help achieve the outcomes of this policy and; **Support** the Government of Alberta's wellness initiatives. Successful implementation of Active Alberta will mean Albertans will know what they are receiving from the significant investments made in the sector. More importantly, successful implementation of the Active Alberta policy should lead to improved health and well-being for Albertans and their communities. Evaluation is in progress. The evaluation of policy will emphasize the outcomes that are achieved. Work is in the preliminary stages to identify how to measure the outcomes so that an accurate results can be achieved. For more information please visit www.active.alberta.ca.



British Columbia

AFTER SCHOOL SPORT INITIATIVE

Developed in 2010 and implemented in 2011, the After School Sport Initiative is led by BCRPA, BC ministry of Community, Sport and Cultural Development. It targets 17 specific communities across BC that have a greater percentage of children in high needs categories. The primary purpose is to: provide training to leaders in after school programs; to support communities in enhancing, improving and increasing after school programs; to reduce barriers to participation in after school programs; to provide financial support to help with equipment purchases and increase access to facilities; and to increase children's participation in after school programs and hopefully then, increase the overall health of children. BCRPA has been asked to provide HIGH FIVE training, develop a resource to help front line leaders work with vulnerable populations, conduct a community consultation, assist communities in implementation of joint use agreements and create an online collaboration tool. The province has other strategies also. Evaluation is in progress. The goals of the program are to:

1. increase partnerships between different organizations
2. improve health of BC youth including improved eating habits, self-esteem, mental health and reduced substance abuse
3. increase the number of BC youth achieving 60 minutes of physical activity daily
4. improve school outcomes such as attendance, academic achievement, graduation rates.

For more information please contact Milena Gaiga, Ministry of Community, Sport and Cultural Development at 250-356-5183.



Manitoba

MANITOBA IN MOTION PROVINCIAL PHYSICAL ACTIVITY STRATEGY

Developed in 2003 and implemented in 2005, Manitoba *in motion* was initially co-led by the Health & Healthy Living and Recreation portfolios, and is now being actualized by the Healthy Living portfolio. An inter-sectoral working group, consisting of provincial government departments in the health, healthy living, recreation, sport, child development, education and communications services, is also involved. Manitoba *in motion* targets families, children, youth, adults and older adults in home, community, school and workplace settings. The primary objective of this initiative is to help all Manitobans make physical activity part of their daily lives for health benefits and enjoyment. The vision is to make Manitobans healthier by increasing physical activity levels in the province. The provincial government has joined partners in physical activity, health, healthy living, recreation, sport, and education to raise activity levels and reduce barriers to physical activity. There are several components in key settings:

1. Healthy Schools in motion
2. Communities in motion
3. Workplaces in motion
4. Public education and awareness.

Supports available includes resources, information and grant funding. Evaluation is in progress. Awareness surveys were conducted in 2008 and in 2011. The 2011 survey can be found at this link: <http://www.gov.mb.ca/healthyliving/docs/inmotionawarenesssurvey2011.pdf>. For more information please go to www.manitobainmotion.ca.





New Brunswick

CANADIAN SPORT FOR LIFE (CS4L)

Developed and implemented in 1995, CS4L is led in New Brunswick by the Sport and Recreation Branch in New Brunswick, Culture, Tourism and Healthy Living. The CS4L was developed by a team of experts drawn from across Canada and funded by Sport Canada. Each province is responsible for its own strategies to align programs and policies with the model. CS4L is targeted at sport organizations, recreation leaders, teachers, early childhood educators, parents, coaches, as well as health and wellness professionals. In short, there are two strategies that have emerged. The first is to build a better sport system, a system that eliminates some of the negative behaviours of the past. The CS4L advocates for a developmentally appropriate approach by all sports in which every participant gains short and long-term benefits. The second strategy is to use the model to encourage the development of physical literacy by partners throughout the community. The Strategy outlines 7 stages of development (beginning at birth) and 10 key factors which influence development. Individuals will begin with an active start to life and then move to learn fundamental movement skills before learning basic sport skills. These three stages combine to provide a foundation of physical literacy. Participants then choose to progress along an athlete development pathway (Train to Train, Train to Compete then Train to Win), or move into the Active for Life stage where athletic progress is less important. People can transfer between the Active for Life and the developmental pathway as motivations change. Funding opportunities have been available to support partner initiatives. The strategy continually monitors and evaluates progress and adapts to be reflective of the latest evidence. For more information please contact Steve Harris at steve.harris@gnb.ca.

AFTER SCHOOL HOURS (ASH) PROGRAM GUIDELINES

Initiated in 2010 and implemented in 2011, the development of the ASH Program Guidelines was led by the Department of Culture, Tourism and Healthy Living – Government of New Brunswick. Actualization of this initiative is being led by Recreation New Brunswick. Government of New Brunswick Department of Education & Early Childhood Development, Healthy Eating Physical Activity Coalition of New Brunswick, Fredericton Boys and Girls Club, New Brunswick Lung Association and New Brunswick Community Colleges are also involved in bringing this project to life. This initiative targets school-aged children, Kindergarden to Grade 12. The ASH Program Guidelines are designed to specify those practices that most clearly identify high quality in an ASH Program. They are intended to offer all school-aged children affordable opportunities to be active, pro-social and engaged in fun activities while building positive relationships that will last a lifetime. An ASH Program refers to any child and youth recreation-based programming that is offered at minimum, between the hours of 3:00 pm and 6:00 pm Monday to Friday, 3 days a week, during the school year. The framework of the guidelines consists of the following four components:

Physical Activity – Must be a minimum of 30 minutes per day and a minimum of 30% of time in one week, in keeping with Canadian Physical Activity Guidelines.

Healthy Eating – Activities to promote healthy eating, nutrition, and food preparation skills must be provided 20 % of the time.

School Work / Homework – Homework and other school work shall be kept at a maximum of 20% of time, in keeping with Canadian Sedentary Behaviours Guidelines.

Community Strengths – Recognizing the wide diversity of interests and abilities, program content is flexible to reflect the strengths and interest of the community, parents and participants 30% of the time.

In addition to the guidelines, an ASH information kit was developed and provided to grant applicants to increase their capacity to deliver a quality program. This year \$1,000.00 grants were given to 31 ASH Programs that met the guidelines and criteria. Evaluation is in progress and an external evaluator has been hired. For more information please contact Sarah Wagner at rnb@recreationnb.ca.



Newfoundland

ACTIVE, HEALTHY NEWFOUNDLAND AND LABRADOR

This 10 year strategy was initially started in 2005 and was approved for implementation in 2007. Active, Healthy Newfoundland and Labrador is a recreation and sport strategy for Newfoundland and Labrador. The strategy has led the way for the development of a newly formed Provincial Physical Activity Coalition which works to support this strategy. This initiative was led by the Department of Tourism, Culture and Recreation and Recreation NL. Involved in the actualization of this strategy were: the Department of Tourism, Culture and Recreation, the Department of Health and Community Services, the Department of Education, the Department of Human Resources and Employment, Recreation Newfoundland and Labrador, Sport Newfoundland and Labrador, School Sports Newfoundland and Labrador and Memorial University of Newfoundland. The two primary objectives of this strategy are focused around enhancing physical activity. These include:

1. to increase participation in recreation and sport and physical activity, and
2. to encourage and support communities and organizations to improve access to recreation and sport by overcoming barriers to participation.

The target audience for this strategy is all Newfoundlanders and Labradorians especially students, seniors, women and girls, persons of lower income, and Northern/Aboriginal populations. *Active, Healthy Newfoundland and Labrador; A Recreation and Sport Strategy for Newfoundland and Labrador* provides a framework of vision, values, principles, six key directions and related goals, objectives and actions that guide government and stakeholders as collaborative work is done to increase

engagement in physical activity throughout the province and ultimately towards a healthy, confident and vibrant society. This framework will also work to encourage citizens to improve quality of life, improve health, enhance social interaction, personal fulfillment and the achievement of excellence. The six key directions are:

1. Increased opportunities for involvement and participation in recreation, sport and physical activity
2. Improved citizen access to recreation and sport opportunities
3. Strengthened public sector support of recreation and sport through revitalizing the Recreation and Sport Division and better coordinating our system of support
4. Providing and supporting opportunities for all citizens to reach their highest potential in sport
5. Building human resources capacity and
6. Building capacity through infrastructure.

The provincial recreation and sport strategy contains a performance monitoring framework within the strategy itself. This provides an ongoing means to track progress on the strategy against goals, objectives and key actions. The Department of TCR reported from 2007-08 to 2011-14 on the first four years of strategy implementation against stated goals and objectives within the Department of TCR's Strategic Plan 2008-2011 and annual reporting. This three-year summary information can be found at <http://www.assembly.nl.ca/business/taled/pdfs/2010-11TCR-AR.pdf>. In addition to this overall performance monitoring, the Department tracked progress against the goal of increased physical activity for children and youth as a key indicator. This is also reported at <http://www.assembly.nl.ca/business/taled/pdfs/2010-11TCR-AR.pdf>. For more information please contact Janet Miller Pitt at jpitt@gov.nl.ca.



Northwest Territories

MONITORING, EVALUATION, AND ACCOUNTABILITY SYSTEM (MEA SYSTEM)

Developed in 2010 and implemented in 2011, the MEA System is being led by the NWT Sport and Recreation Council (SRC). Also involved are: Sport North Federation, NWT Recreation and Parks Association, Beaufort Delta Sahtu Recreation Association, Mackenzie Recreation Association, and the Aboriginal Sport Circle of the Western Arctic. The initiative targets NWT Sport and Recreation stakeholders. The purpose of establishing an MEA system is to provide useful information to help the SRC learn about the progress and contributions that are being made toward its strategic goals and priorities; make necessary adjustments to build on strengths and address challenges faced within its strategic goals and priorities; and operate more effectively and efficiently. The Monitoring Plan shows how all of the SRC's achievements combine to influence a contribution towards SRC's stated impact and mission: Build a culture of physical activity in the NWT, for all. Eight guiding principles have been identified as part of this system. They are to:

1. Promote Organizational Learning
2. Continually Improve the Organization
3. Strengthen the organization
4. Use multiple approaches
5. Evaluate and address strategic issues
6. Create a participatory process
7. Allow for flexibility
8. Build capacity.

Evaluation of this system is in progress and scheduled to be completed in late 2013. For more information please Jennifer young at jennifer@nwtsrc.com.

NORTHWEST TERRITORIES SPORT & RECREATION COUNCIL INVESTMENT MODEL

Developed in 2010 and implemented in 2011, the SRC Investment Model is being led by the Northwest Territories Sport & Recreation Council. Also involved are: Aboriginal Sport Circle of the Northwest Territories, Beaufort Delta Sahtu Recreation Association, Mackenzie Recreation Association, Northwest Territories Recreation and Parks Association and Sport North Federation – Government of Northwest Territories (Municipal & Community Affairs- Sport, Recreation, & Youth Division). The target audiences for this initiative are the Aboriginal Sport Circle of the Northwest Territories, Beaufort Delta Sahtu Recreation Association, Mackenzie Recreation Association, Northwest Territories Recreation and Parks Association and Sport North Federation. The primary purpose of this model is to support sport and recreation program/initiatives at the community, regional and territorial levels as they work toward increasing physical activity in the NWT. This model directs resources to those programs/initiatives that create the greatest value for the public. An emphasis on evaluation and measurement is at its core, and a practice of continuous improvement is promoted. Evaluation is ongoing. For more information please Jennifer young at jennifer@nwtsrc.com.

ACTIVE AFTER SCHOOL

Developed in 2009 and implemented in 2010, Active After School was developed by the Government of NWT – Department of Municipal and Community Affairs. It is being implemented by NWT Schools. Other Healthy Choices Departments of the Government (Health & Social Services and Education, Culture and Employment) were also involved. The initiative targets children in schools and its primary purpose is to increase the physical activity levels of school aged children and youth while providing them with healthy lifestyle options in the after school time period. Funding is provided to schools and community based organizations to build existing programs or create new physical activities during the after school time period, with a strong focus on engaging currently inactive or under active youth. Financial support of \$615,000 annually, beginning in 2010/2011, has been allocated to Active After School. A monitoring and evaluation plan is under development. By 2015, formative and summative evaluation processes will be well underway with interim data available. It is expected that this initiative will show an increase in the physical activity rates of children and youth. For more information please go to www.choosenwt.com.

Nova Scotia

CHILDHOOD OBESITY PREVENTION STRATEGY

The strategy will be built upon a foundation of social policy and supported by an engagement strategy and evaluation plan. It recognizes that the interdependent nature of those objectives requires an integrated approach and that multiple actions sustained over time are required to successfully reduce obesity and chronic diseases. The strategy will outline collective action that will create a healthier, more supportive environment for children, youth and their families. Taking a whole-of-government approach, the strategy includes actions to support healthy child development, health literacy, food policy, active transportation, land use planning, and social marketing. At its heart, the strategy will focus on making it easier for people to eat better and be more active. Together with strategies for tobacco, alcohol, mental health and addictions, public health renewal, sustainable transportation, road safety and others, the childhood obesity prevention strategy will contribute to a broad, government prevention agenda.

One of the compelling messages heard during the consultation process was that Nova Scotia is already doing many things well. Through the strategy, existing efforts and resources will be supplemented by new resources in a comprehensive approach. \$2 million is allocated for new and enhanced program and policy development in the 2012/13 fiscal year.

An evaluation framework, including process evaluation and measures for short, intermediate and long-term outcomes, will be developed by December, 2012. Success will be defined by sustainable upward or downward trends in key indicators, recognizing that it takes time for trends to slow before they can be reversed. The URL that follows is for the Growing Up Healthy website, a site created to support the development of the childhood obesity prevention strategy. A new website will be available when the strategy is launched in the spring of 2012.

<http://www.gov.ns.ca/growinguphealthy/>



Nunavut

NUNAVUT PHYSICAL ACTIVITY GUIDELINES AND TIPS & NUNAVUT “BE ACTIVE – EVERY DAY” POSTER

Developed in 2011 and implemented in 2012, this initiative is being led by the Sport and Recreation Division of the Nunavut Government. The Department of Culture, Language, Elders and Youth, in partnership with the Department of Health and Social Services, are also involved. The primary purpose of this initiative is to give residents of Nunavut up-to-date information on the physical activity guidelines and tips in a culturally relevant way. The new physical activity resources were translated in all 4 official territorial languages and adapted in consultation with community members from across Nunavut. The illustrations and information are culturally relevant and meaningful to residents. They demonstrate how accessible physical activity is and aim inspire all ages to be active throughout the seasons. The Government of Nunavut's department of Health and Social Services greatly assisted in making this project possible through financial and human resource support. The Community Health Representatives across various communities hosted information gathering sessions which shaped the new resources. No evaluation is planned. For more information please contact Christine Lamothe at clamothe@gov.nu.ca.

AFTERSCHOOL PHYSICAL ACTIVITY FUNDING

Implemented in 2010, this initiative is being led by the Sport and Recreation Division and Department of Culture, Language, Elders and Youth. It targets elementary and high school students and was developed to create physical activity opportunities during the after school. The Afterschool Physical Activity Program is designed to train leaders to implement physical activity programs for children and youth specifically during 3 to 6 pm on weekdays. New funding from the Public Health Agency of Canada was obtained in 2010 to implement this program. The program is expected to increase the number of youth trained in HIGH FIVE: Principals of Healthy Child Development, and for more afterschool physical activity programs to be offered in more communities throughout the territory. No evaluation is planned at this time. For more information please contact Christine Lamothe at clamothe@gov.nu.ca.

PHYSICAL ACTIVITY INITIATIVES

Implemented in 2008, The Physical Activity Initiatives are led by the Sport and Recreation Division and Department of Culture, Language, Elders and Youth. They are targeted toward all residents of Nunavut in order to increase community physical activity opportunities throughout the territory. All Nunavut municipalities are eligible for up to \$10,000 to create, continue and/or expand ongoing physical activity programs each year. It is expected that the number of programs offered, and an improvement in the quality of ongoing physical activity programs across the territory, will increase. Evaluation is in progress. Community program administrators are required to complete program evaluation at the end of the fiscal year and prior to receiving future funding. The Sport and Recreation Division keeps a summary of the best grant applications and evaluations to use as examples for new applicants. For more information please contact Christine Lamothe at clamothe@gov.nu.ca.

TRANSLATED CSEP PHYSICAL ACTIVITY GUIDELINES

This initiative is being led by the Sport and Recreation Division and Department of Culture, Language, Elders and Youth. In effort to increase physical activity levels of all Inuit, the new CSEP Physical Activity Guidelines are being translated into Inuktitut and Inuinnaqtun which are set to be available for downloading from the CSEP website. This will allow for all Inuit to have access to the physical activity guidelines in their language of choice. For more information please contact Christine Lamothe at clamothe@gov.nu.ca.



Ontario

HEALTH AND PHYSICAL EDUCATION (H&PE) CURRICULUM K-12

Developed in 2010 and implemented in 2012, the H&PE Curriculum initiative was led by the Ministry of Education. Over 2000 NGO's, teacher and parents consulted on the project. H&PE is the key to making Ontario the healthiest province in Canada. Reaching 2.1 million students attending Ontario's 5,000 publicly funded schools including at-risk populations and emphasizing the importance of schools as a health promotion setting. The H&PE Policy addresses physical and health literacy of students. The policy seeks to increase the comprehension, commitment and capacity of students to lead healthy active lives. This intervention is the most effective and cost efficient way of providing children and youth with the knowledge and skills that will help them make safe and informed decisions now and into the future. Ophea has produced the H&PE Curriculum Support Resources grades 1-8, to address all expectations of the policy. Although there is no formal evaluation planned, Ophea has invested some equity to conduct school board level evaluations. For more information please visit the Ministry of Education Ontario Website.

OBESITY STRATEGY

Developed and implemented this year, the Obesity strategy is led by the Ontario Ministry of Health. The primary purpose is an annual allocation of \$10 million toward a strategy to encourage children to eat healthy and be physically active as the first step toward reversing troubling numbers of obese Ontario children, while fostering healthy living habits and environments. There is currently no evaluation planned. For more information please visit the Ontario Ministry of Health and Long Term Care website.

AFTER SCHOOL STRATEGY

Developed and implemented in 2011, the After School Strategy was led by the Ministry of Tourism, Sport and Culture with the help of the Public Health Agency of Canada. It's primary purpose is to provide training and resources to those implementing after-school activities in select sites across the province. Training and resources have been allocated in order to actualize this strategy. Evaluation is in progress through questionnaires managed by Parks and recreation Ontario. For more information please visit the Parks and Recreation Ontario website.



PEI

go! PEI

Developed in 2009 and implemented in 2010, go!PEI is a Recreation PEI led initiative done in collaboration with the Department of Health & Wellness and Healthy Eating Alliance. Bilateral funding support was provided by the Public Health Agency of Canada and the Province of PEI. Additional provincial and community partners who have a responsibility for physical activity and healthy eating have also been involved. It is targeted at all residents of PEI and its objective is to increase the percentage of Prince Edward Islanders who are achieving the recommended physical activity levels and following the Eating Well with Canada's Food Guide to ensure a well-balanced and healthy diet. go! PEI is designed to remove as many barriers as possible by offering programs, support and education to assist Islanders in meeting their healthy living objectives. By offering free programs in communities all across the province, that focus on walking, running, biking, hiking, snowshoeing and healthy eating. PEI is creating a culture of healthy living in the Province. go!PEI has created a province wide network of professionals, organizations and champions that helps spread this message and as a result it allows neighbors and friends to support one another. The entire program is built on seven principles which include programs that:

1. are low cost or no cost
2. have readily available infrastructure across the Province
3. require limited equipment
4. do not have time constraints
5. can be done as an individual or as part of a group
6. can be done by any age group
7. can be done year round

There is a marketing and social media campaign as part of this initiative which keeps healthy living in front of Islanders all year long. Based on the needs of Islanders, the initiative continues to grow as we create new partners and diversify our programming mix. Evaluation is in progress. To date over 1100 Islanders have completed this program and report having had positive experiences. For more information please go to www.gopei.ca.

PEI ACTIVE START

Developed and implemented in 2011, PEI Active Start is a Sport PEI led initiative done in collaboration with the Department of Health and Wellness and Early Childhood Association of PEI. The target for this initiative is preschool children aged 3-6. The primary objective is to provide every 3-6 year old Island child the opportunity to master fundamental motor and sport skills through participation in a high quality, province-wide Active Start Program. The Active Start program is a series of lesson plans that parents, educators and community program leaders use to teach preschool children basic movement skills in a fun play-based environment. The training was offered to provincial early childhood educators and community recreation departments. The program has been piloted in nine licensed child care centers and two community based stand alone programs. Evaluation of the initiative is planned for 2012-13 and will include a research and measurement piece in coordination with Sport PEI and UPEI. The anticipated outcome is that a larger number of influential people in a preschooler's life will have a greater understanding of the importance of fundamental movement skills and will have the necessary tools to incorporate them into a child's day. As a result, more children will acquire the necessary skills allowing them to be more confident in their lifelong physical activity or sport pursuits. For more information please contact Jamie Whynacht at jwhynacht@sportpei.pe.ca.





Saskatchewan

SASKATCHEWAN IN MOTION

Developed in 2002 and implemented in 2003, Saskatchewan in motion is led by a Strategic Development Council and is actualized with governance and accountability support from the Saskatchewan Parks & Recreation Association. Saskatchewan **in motion** is an authentic partnership initiative which involves a huge variety of organizations from across the province. Initially it targeted all Saskatchewan people but in 2006 switched focus to school-aged children and youth. Saskatchewan in motion is a province wide movement that uses social marketing and community mobilization approaches to increase physical activity opportunities for children and youth. Saskatchewan **in motion** delivers strategies that work toward three outcomes: all Saskatchewan children and youth will be active a minimum of 30 minutes each day at home; all Saskatchewan children and youth will be active a minimum of 30 minutes each day at school. All Saskatchewan children and youth will be active a minimum of 30 minutes each day in the community. Within each outcome/setting, there are five priority strategies: increase physical literacy; increase access & decrease barriers to participation in community programs and services; create/influence built environments that support active choices; provide parent education; and increase community leadership capacity. Evaluation is ongoing. For more information please go to www.saskatchewaninmotion.ca.

ABORIGINAL SPORT DEVELOPMENT - "BUILDING A FOUNDATION FOR THE FUTURE"

Developed and implemented in 2000, the initiative was led by Sask Sport Inc., with guidance from the Aboriginal Sport Leadership Council. The Aboriginal Sport Development Strategy "Building a Foundation for the Future" provides direction and support for Aboriginal sport development initiatives in Saskatchewan. A need for increased focus and support for aboriginal sport participation at the community level and through mainstream sport efforts was prioritized. This concept served as an early catalyst, and was used in the preparation and training for the 2003 North American Indigenous Games. Since then, Sask Sport has made numerous new policy decisions and investments in a strategy to increase human and financial resources in support

of aboriginal participation in sport programs. Over the past number of years, the policy/strategy has grown to include; Urban Aboriginal Community Grant program, Aboriginal Coaches & Officials program, Aboriginal Community Sport Development Program, Northern Community & School Recreation Coordinator Program, Dream Brokers Program, KidSport (to provide direct financial support to low income families to subsidize the costs of sport participation), Active Kids Nutrition Program and Aboriginal Excellence Program. Evaluation is in progress and results continue to influence the direction and growth of the initiative. For more information please go to www.sasksport.sk.ca.

INSPIRING MOVEMENT: TOWARDS COMPREHENSIVE SCHOOL COMMUNITY HEALTH: GUIDELINES FOR PHYSICAL ACTIVITY IN SASKATCHEWAN SCHOOLS

Developed and implemented in 2010, this initiative is led by the Ministry of Education and the Saskatchewan School Boards. The goal is to work with school boards to ensure children and youth engage in 30 minutes of moderate to vigorous physical activity daily, while increasing healthy food options in schools. Boards of education, in collaboration with schools, youth, School Community Councils, parents and communities, will develop new or strengthen existing physical activity policies and administrative procedures. Adopting or strengthening policies based on these guidelines will ensure a consistent approach to physical activity for all Saskatchewan schools. Evaluation is in progress. For more information please go to www.education.gov.sk.ca.

The Yukon

RENEWED YUKON ACTIVE LIVING STRATEGY

This Strategy was developed in 2000 and renewal began in 2010. Yukon Government's Sport and Recreation Branch was the lead organization for renewal of the Yukon Active Living Strategy. A Stakeholder's Review Committee, consisting of NGO's, government, recreation professionals and community representatives, generously shared their insights and perspectives enabling development of the Strategy's framework, goals and recommendations for action. The Strategy envisions a Yukon that is active, where health, well-being and physical activity are viewed as an investment in the quality of life for every individual, and for vibrant, healthy and sustainable Yukon communities. The renewed Yukon Active Living Strategy builds upon the original Strategy's vision. The guiding principles of Health Equity and Inclusion, Informed Decision Making, and Shared Responsibility and Collaboration embody the beliefs upon which the renewed Strategy stands. Strategic directions and goals define broad and long-term changes needed to realize the vision. Recommendations for action stem from the strategic goals under the headings of: Leadership and Policy, Community Capacity, Enabling Environments, Social Marketing, Programs and Services, and Monitoring and Evaluation. Implementation of the recommendations for action occur through four settings: Active Yukoners; Active Yukon Communities; Active Schools; and Active Workplaces. Although responsibility for implementation of the renewed Strategy rests with the Sport and Recreation Branch, cooperative and collaborative efforts between governments, communities, businesses, non-profit groups and Yukon residents are key to successful implementation. Evaluation to date demonstrates public recognition of Active Yukon branding and the development and implementation of a variety of programming fostering active lifestyles for Yukoners of all ages. The Active Yukon Schools component reached all Yukon students and schools. For more information please visit <http://lin.ca/resource-details/20487>.

YUKON-CANADA HEALTHY LIVING BILATERAL AGREEMENT

Developed in 2007 and implemented in 2008, the development of this bilateral agreement is led by the Public Health Agency of Canada through Canada's Healthy Living Fund, Yukon Government Department of Community Services Sport and Recreation Branch, and Yukon Government Department of Health and Social Services Health Promotion Unit. Actualization of the agreement is led by the Recreation and Parks Association of the Yukon. In the Yukon, the Healthy Living Project is supported through the Bilateral Agreement. The project is implemented and evaluated by the Recreation and Parks Association of the Yukon. The project fosters environments and provides opportunities for Yukoners to participate in active and healthy lifestyles. The primary focus is on activities that support active living and healthy eating. The regional stream of the fund takes the form of bilateral agreements on physical activity and healthy eating between the Public Health Agency of Canada and provincial/territorial governments. Both levels of government set priorities jointly, issue solicitations, review project proposals jointly, and invest funds that go directly to non-governmental organizations in support of joint priorities. Each level of government invests approximately the same amount of funding over the life of the agreements. <http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/hlu-umvs/hlfund-fondspmvs-eng.php>. Evaluation of the Yukon's Healthy Living Project is ongoing. For more information please contact the Recreation and Parks Association of the Yukon at rpadmin@rpay.org.



<EXIT>



List of Acronyms

BMI

Body mass index

CANPLAY

Canadian Physical Activity Levels
Among Youth Survey

CAPL

Canadian Assessment of
Physical Literacy

CFLRI

Canadian Fitness and Lifestyle
Research Institute

CFTC

Children's Fitness Tax Credit

CHEO

Children's Hospital of Eastern Ontario

CHMS

Canadian Health Measures Survey

CSEP

Canadian Society for Exercise Physiology

CSGVP

Canada Survey on Giving, Volunteering
and Participating

DPA

Daily Physical Activity

DPAH

World Health Organization's Global
Strategy on Diet, Physical Activity,
and Health

GDP

Gross Domestic Product

H&PE

Health and Physical Education

HALO

Healthy Active Living and Obesity
Research Group at the Children's Hospital
of Eastern Ontario Research Institute

HBSC

Health Behaviour in School-Aged
Children Survey

HSF

Heart & Stroke Foundation

INC

Incomplete

MVPA

Moderate- to vigorous-intensity physical
activity (e.g., aerobics, jogging, running)

NAIG

North American Indigenous Games

NCDs

Non-communicable diseases

NKS

National Kids Survey

NLSCY

National Longitudinal Survey of
Children and Youth

PAM

Physical Activity Monitor

PE

Physical Education

PHAC

Public Health Agency of Canada

RInC

Recreation Infrastructure Program

SBRN

Sedentary Behaviour Research Network

WHO

World Health Organization

Methodology and Data Sources

Unlike other report card publications, which often rely on a single data source, the Active Healthy Kids Canada Report Card synthesizes data from multiple data sources and the research literature. The development of indicators and the assignment of grades involve an interdisciplinary Research Work Group, including researchers from across Canada. An annual summary of research data and literature is prepared by staff at the Children's Hospital of Eastern Ontario Research Institute to facilitate the review of the information. Grade assignments are determined based on examination of the current data and literature for each indicator against a benchmark or optimal scenario, assessing the indicator to be poor, adequate, good or excellent:

- A** = We are succeeding with a large majority of children and youth
- B** = We are succeeding with well over half of children and youth
- C** = We are succeeding with about half of children and youth
- D** = We are succeeding with less than half, but some, children and youth
- F** = We are succeeding with very few children and youth

Key considerations include trends over time, international comparisons and the presence of disparities. Analysis of trends over time and international comparisons are conducted where possible, as this information is not always available for all indicators. Disparities can be based on disabilities, race/ethnicity, immigration status, geography (provincial/territorial comparisons), socio-economic status, urban/rural setting, gender, age (e.g., adolescence), etc. When evidence of disparities exists, grades are lowered to reflect that we are not reaching all children and youth who may benefit most from physical activity opportunities.

Some indicators are stand-alone, while others are comprised of several "components." During the grade assignment meeting, each component of an indicator is assessed. Over the evolution of the Report Card, there has been an attempt to move toward indicators that are broad enough to contain various components in their assessment, so that indicators can become more consistent from year to year.

The following are major data sources used in the 2012 Report Card:

Canadian Health Measures Survey

(CHMS; www.statcan.gc.ca/daily-quotidien/100113/dq100113a-eng.htm)

The Canadian Health Measures Survey, launched in 2007, is collecting key information relevant to the health of Canadians by means of direct physical measurements such as blood pressure, height, weight and physical fitness. As part of the CHMS, a clinical oral health examination helps to evaluate the association of oral health with major health concerns such as diabetes, and respiratory and cardiovascular diseases. In addition, the survey is collecting blood and urine samples to test for chronic and infectious diseases, as well as nutrition and environment markers. Through household interviews, the CHMS is gathering information related to nutrition, smoking habits, alcohol use, medical history, current health status, sexual behaviour, lifestyle and physical activity, the environment and housing characteristics, as well as demographic and socio-economic variables.

Canadian Physical Activity Levels Among Youth Survey (CANPLAY; www.cflri.ca)

The Canadian Fitness and Lifestyle Research Institute conducts a major national survey annually to examine physical activity levels of children and youth. CANPLAY studies the current fitness and physical activity patterns of young people in Canada. Approximately 10,000 children and youth (approximately 6,000 families) are randomly selected across Canada. The study has been conducted since 2005. Pedometers are used to measure the number of steps taken daily by each participant. CANPLAY is a joint venture of the Canadian Fitness and Lifestyle Research Institute, the Public Health Agency of Canada and the Interprovincial Sport and Recreation Council.

Health Behaviour in School-Aged Children Survey (HBSC; www.hbsc.org)

Results are based on the Canadian data from the World Health Organization's 2009-10 HBSC. The HBSC is a repeated cross-sectional survey conducted every 4 years. The survey consists of a classroom-based questionnaire. The sample was designed according to the international HBSC protocol in that a cluster design was used with the school class being the basic cluster and the distribution of the students reflected in the distribution of Canadians in Grades 6 to 10 (ages 10-16). Canadian schools were selected for this study using a weighted probability technique to ensure that the sample is representative of regional geography and key demographic features such as religion, community size, school size and language of instruction. Schools from each province and territory, as well as urban and rural locations are represented. A total of 26,078 youth from 436 schools across the country participated in the 2009/10 HBSC survey. The Canadian HBSC was approved by the Queen's University General Research Ethics Board. Consent was obtained from the participating school boards, individual schools, parents and students. Student participation is voluntary.

The HBSC includes 2 main components: 1) a questionnaire completed by students that asks about student health behaviours (such as physical activity and active transportation), lifestyle factors and demographics; 2) an administrator questionnaire distributed to each school principal that inquires about school demographics, policy, infrastructure and the school neighbourhood setting (completed for 411 of the 436 participating schools); and 3) geographic information systems (GIS) measures of built and social features in the school neighbourhoods.

Keeping Pace

This study (formerly Physical Activity of Children and Youth in Nova Scotia - PACY) is a provincial government funded surveillance project conducted every 4 years where the physical activity and dietary intake of a provincially representative sample of students in grades 3, 7, and 11 are measured. Data are also collected on the various factors that may influence physical activity and dietary intake. The results from the 3 waves of surveillance have been used to inform various health promotion initiatives.

Opportunities for Physical Activity at School Survey (www.cflri.ca)

The content of the 2011 Opportunities for Physical Activity at School Survey is designed to explore the availability and composition of physical education programming at school, determine the availability and adequacy of facilities and opportunities for physical activity, explore the provision of extracurricular physical activities, examine policies related to physical activity at school, and describe the broader physical and social environments at school. The survey consists of a self-completed questionnaire that was mailed to a total of 8,000 Canadian schools. The survey was conducted by the CFLRI and funded through the *Children's A-TEAM* collaboration (Children's Activity Through Exchange and Measurement) being led by the Healthy Active Living and Obesity Research Group at the CHEO Research Institute.

Physical Activity Monitor (PAM; www.cflri.ca)

The PAM is an annual telephone survey conducted by the Canadian Fitness and Lifestyle Research Institute that tracks changes in physical activity patterns, factors influencing participation, and life circumstances in Canada. As such, it tracks outcome indicators of the efforts to increase physical activity among Canadians. To date, 14 waves of PAM have been completed with theme content cycled in and out across planned periods (e.g., every 5 years).

The Play Report

IKEA undertook a major research-driven project to investigate the subjects of children's development and play. Survey fieldwork was carried out online in 25 countries (including Canada) by Research Now in London, England. Family Kids and Youth partnered with IKEA to design the questionnaire, analyze the results and provide an overview of child development and background to the importance of play.

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